

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter is a description of the perceptions that serving primary school teachers have of their preparation and training in classroom questioning skills in primary teachers' colleges of education. The chapter was organised in eleven sub-sections consisting of the following sections: background, statement of the problem, objectives, and research questions, purpose of the study, significance of the study, theoretical foundations, operational definitions and organisation of the thesis. The main concern of this study was to investigate serving primary school teachers' perceptions of their training and preparation in classroom questioning skills in primary teacher colleges of education.

1.1 Background

Teaching in this modern era has been described as a complex and challenging profession that involves a lot of professional skills, personal characteristics and specialised based knowledge (Cole & Chan, 1994). Teaching is a process of human interaction and an important aspect of quality education. The role played by teachers in the education system is significant because teachers are the custodians of knowledge and instructors of instructions. They are the key personnel in the educational system as they are in the forefront of education, seriously engaged in various teaching and learning processes, and the final personnel in the implementation of educational principles and theories. The importance of teaching is not only appreciated by educators and practitioners, but by the public at large (Smith, 1996). Effective teaching is not an accident, but a planned activity that involves the learning of different teaching skills that need to be integrated so as to achieve the instructional goal of classroom teaching (Cole & Chan, 1994). Teaching skills refer to skills that teachers use in class in order to enhance pupils' learning through the teaching and learning activities in classroom (Kyriacou, 2001). Biseat (1987) also looked at teaching skills to be distinct sets of identifiable capabilities or behaviours that a teacher uses in order to carry out the task of teaching. A skilled teacher provides an opportunity to develop the pupils thinking skills and thinking strategies which are a foundation for thoughtful

learning (Ministry of Education, 2009). One of the critical indicators of a skilled primary school teacher is determined by the choice and usage of teaching skills.

Research findings (E.g. Dillion, 1988; Orlosky, 1982; Kauchak & Eggen, 1988) continuously have shown that one of the key teaching skills that are frequently used by primary school teachers in their classrooms is classroom questioning. Classroom questioning has been referred to as the core skill of classroom teaching and a primary component to understanding teaching (Klein et al., 1991; Frazee & Rudnitski, 1995; Nuaman & Lamb, 1996). This means that classroom questioning skills are a key to effective instructions. The systematic use of classroom questioning skills in teaching (and learning) is as old as classrooms (Brown & Edmondson, 1989). Classroom questioning skills date to the time of Socrates of ancient Greece and Confucius of ancient China. From the time Socrates first demonstrated on the use of classroom questioning skills, these skills have been given greater recognition in education for their unique importance and as promising devices in the pursuit of right knowledge and action. Tan (2007) points out that the belief of Socrates was that all interactions that take place between primary school teacher and learners need to be developed on the basis that all knowledge is known or knowable only if an individual has got the skills of asking the right questions.

The first serious research on the skills of questioning was done by Stevens Romiette in 1912. Stevens (1912) highlighted the centrality of classroom questioning skills in classroom procedures and over the years many educationalists have acknowledged the significance of teachers' classroom questioning skills in educational processes as noted by Dewey (1993:266) that "what's in a question, you ask? Everything, it is the way of evoking, stimulating responses or stultifying inquiry. It is in essence the very core of teaching."

Effective classroom questioning is both a method and a skill that is widely used in classrooms (Dillion, 1988; Orlosky, 1982; Kauchak & Eggen, 2001). Orlich et al (1990) pointed out that classroom questioning skills are only next to lecturing and most common teaching skills employed in classrooms. Classroom questioning skills have been found to be an inseparable part of classroom interactions (Edwards & Bowman, 1996). Without classroom questioning skills, there will be no demonstrations, investigations, discussions, interactions and projects in classrooms (Muzumara, 2011). Classroom questioning skills, therefore, play a very crucial role in classroom teaching. Richards and Lockhart (1996) sum up several reasons of using

questioning skills in classrooms by teachers as: 1) to stimulate and maintain students' interest; 2) to encourage students participation in a lesson; 3) to encourage students to think and focus on the content of the lesson; 4) to enable a teacher check for students' understanding; 5) to elicit particular structures or points; 6) to enable the teacher clarify what a student has said. Additionally, skillful classroom questioning by the teacher can stimulate learners to produce wonderful ideas as Danielson (1996) observed that good and skilled classroom questioning, when carefully crafted and framed would enable learners to really explore the content and expose learners' understanding of concepts.

The quality and quantity of classroom questioning skills would influence the quality of classroom learning (Orlich et al 1985, cited in Richards & Nunan, 1990). Ministry of Education (1996) supports the above notion when it mentions that the quality and effectiveness of an education system lies heavily on the quality of its teachers. The educational attainment of learners in classrooms hinges crucially on the skills, commitment and resourcefulness of teachers. Therefore quality of teachers in Zambia directly has an influence on the future nation and its citizen. Maisley and Sullivan (1996) adds that the quality of the classroom is identified by the way classroom questioning skills are being utilised by the teacher in engaging students in creative and active thinking and provide opportunities for communicating about their learning.

Recent models of teaching and learning view teaching and learning as a social activity in which children construct knowledge with their teachers and other learners. In this context, learning has been viewed as a situated social practice in which learners develop identities as members of a particular community. It is also seen as a socially negotiated and arbitrated process (Lave, 1995). This view of teaching and learning recognizes the importance of classroom questioning skills as being central in classrooms.

However, when the teacher does not use classroom questioning skills effectively, they (classroom questioning skills) can be perhaps the most dangerous of all the teaching skills for possible damage to the learners. Wright et al (1997) agree when they say that one ineffective teacher can jeopardise the entire educational success of the child regardless of how many effective teacher she or he may subsequently have.

Poor usage of classroom questioning skills by the teacher can turn learners off learning (Omobola, 2011). Poor or ineffective use of classroom questioning skills by the teacher cannot

only lead to classroom management problems but also poor performance of pupils in class activities more especially in large classes. Some of the characteristics of unskilled classroom questioning skills as observed by Omobola (2011) include poor construction of questions, boring questioning, questions comprehensive only to a few learners, narrow and teachers with only a single answer even when there are several options. Additionally Wragg (1984) identified the following as being characteristics of unskilled questioning: 1) not looking at the learners when asking questions; 2) talking too fast; 3) inappropriate voice or not being clear. Therefore, knowing how to ask questions which are good and effective is a skill that forms the foundation of all teaching.

There is no doubt therefore that classroom questioning skills are important skills that every teacher should strive to acquire and develop as they are one of the few teaching skills for transmitting knowledge, skills and attitudes to the pupils. Classroom questioning is not a gift bestowed upon some teacher but a professional skill that is acquired and developed through training or education rather than an innate ability (Miller, 2007). However, in most primary teachers colleges of education, primary school teachers are believed to know innately how to ask pupils effectively during class lesson time. From college, primary school teachers are told to ask more questions at a high level or more open-ended questions. The assumption that primary school teachers innately know how to ask pupils effectively is inaccurate and insufficient in providing primary school teachers with a framework or mode for good classroom questioning skills. The implication is that teachers need to undergo training and preparation in colleges of education for them to be experts in asking questions. Experts have got both a large well organised knowledge base and often specialised procedures for acquiring and storing information. This means that not merely the exposure to taxonomies that can provide the basis for expertism in classroom questioning but also consciously, deliberate practices in which feedback is sought and used to improve performance. Ideally, expertism in classroom questioning should be acquired at teachers colleges of education and improved through in-service trainings or continuous professional development programmes.

Perception has greater power on the decision making process for the reason that it creates a situation through which decisions are filtered (Rozin& Fallon, 1987).Serving primary school teachers' perceptions of their training and preparation in classroom questioning skills in primary teachers colleges of education has been neglected, given the fact that they are the most likely

school personnel to make use of classroom questioning; they may be in a greater position to make judgement of their training and preparation in classroom questioning skills. This is confirmed by Bandura (1997) when he stated that serving primary school teachers might use their own perceptions as a judgment of their capabilities to constitute a particular path of action in order to produce preferred outcomes. It is significant therefore to have knowledge on how serving primary school teachers perceive their training and preparation in classroom questioning skills in primary teacher colleges. It was important to undertake a study on primary school teachers' perception because it revealed their underlying feelings and attitudes about their training and preparation in classroom questioning skills in primary teacher colleges. McCormick (2001) also adds that perceptions help teachers to perform the cognitive and behavioral functions necessary to regulate group process in relation to goal achievement. In other words, perceptions may serve as one tool that guides primary school teachers in the use of classroom questioning skills.

The perceptions that primary school teachers have on their training and preparation in classroom questioning has a great impact on a variety of teaching skills, styles and model, thus influencing teaching process of the teacher and their productivity in class. Primary school teachers who have a strong belief about being well trained and prepared in classroom questioning skills greatly utilise their skills in class lesson than those primary school teacher with a less strong belief. Perception is linked to experience. The experience that an individual has will influence the perception of that individual. Bandura (1997) states that just as positive experiences increase confidence, negative experiences can make individuals perceive that they are not capable in using certain skills such as classroom questioning skills.

1.2 Statement of the problem

Related literature that was revealed showed that many of the existing studies have mainly concentrated on the following areas of classroom questioning; 1) role of classroom questioning; 2) taxonomies of classroom questioning ; 3) frequency of type of questioning; (4) the quality of classroom questioning; (5) techniques of questioning, (6) framing of classroom questioning; (7) Effects of classroom questioning in different study areas such as English, social studies and mathematics (Kauchak & Eggen, 2001 Lemlech, 1988), (8) relationship between cognitive development, type of questioning and their frequency (e.g Jensen & Kelly 2000), (9) provision of

tips on how to use classroom questioning (kyriacou, 1997; Siyakwazi & Siyakwazi 1999); (10) effects of classroom questioning on pupils learning and achievements in classroom content (Hunkins, 1996; Dillion, 1988, Redfield & Rosseau, 1981). However, studies on teachers perceptions of their training and preparation in classroom questioning skills in primary teachers colleges of education are not known hence creating a gap in our knowledge. There is, therefore need to investigate the perception primary school teachers have on their training and preparation in classroom questioning skills in primary colleges of education among serving primary school teachers in Lukulu district.

1.3 Purpose of the study

The purpose of the study was to investigate serving primary school teachers' perceptions of their training and preparation in classroom questioning skills in primary teachers colleges of education in Lukulu district of Zambia.

1.4 Objectives

The specific objectives of this study were to:

- i) establish perceptions primary school teachers have on their training and preparation in classroom questioning skills in primary colleges of education.
- ii) identify the type of questions primary school teachers prefer using in their classrooms.
- iii) determine whether there is a relationship between primary school teachers initial training and preparation in primary college of education and the type of questioning they prefer using in class.

1.5 Research questions

- i) What are the perceptions serving primary school teachers have on their training and preparation in classroom questioning skills in primary teacher colleges of education?
- ii) What type of classroom questioning do serving primary school teachers prefer using in their classrooms?

- iii) Is there a relationship between serving primary school teachers' initial training and preparation in primary teachers college of education and the type of classroom questioning they prefer using in classrooms?

1.6 Significance of the study

Classroom questioning skills of primary school teachers are one of the teaching skills teachers use to inform their teaching and the learning of their students. This study investigated serving primary school teachers' perceptions of their training and preparation in classroom questioning skills in primary teachers colleges of education in Lukulu district of Western province. The findings of this study provide insights on how primary school teachers perceive their training and preparation in classroom questioning skills. Moreover, the results of this study may not only assist primary school teachers but also college lecturers and tutors and curriculum developers in Zambia.

Furthermore, helpful knowledge was obtained about how teachers acquire habits of classroom questioning. Therefore, curriculum developers would be able to develop better pre-service and in-service professional development strategies that would improve classroom questioning skills among teachers. Schools may use the information to strength their teacher group meetings for their respective schools. Teacher Education Department of the Ministry of Education which is responsible for professional development of in-service teachers may use the information to develop an in-service programme for in-service teachers.

The results from this study also add to the existing literature on training and preparation of teachers in classroom questioning skills. Research studies on classroom questioning focused on: 1) purpose of classroom questioning; 2) classifications of questions and frequency of type of questions; 3) frequency of questioning; 4) ways of questioning; 5) pattern of questions; 5) effects of classroom questioning in different study areas,7) on the relationship between types of questions and their frequency and cognitive development. This study focused on training and preparation of primary school teachers in classroom questioning skills in primary teachers colleges of education. It is hoped, therefore, that this study will add a different dimension to literature on classroom questioning skills.

1.7 Delimitation

The study was conducted in Lukulu district of Western Province. The location was chosen because of its accessibility to the researcher and sample comprised of serving primary school teachers only.

1.8 Limitation

There are 300 serving primary school teachers in Lukulu and yet only 100 primary school teachers participated in this study. This study used purposive random sampling in order to include most of the variables. The sample size, sample frame and sampling methods make it difficult to generalise the results to the population of primary school teachers and schools in Lukulu district and other districts. However, the results are generalizable to the primary school teachers sampled and give an insight of what the picture could be like if more participants and other sampling methods were used.

1.9 Theoretical Foundations

Social cognitive theory of Bandura (1997) and Allport's theory (1966) formed the theoretical framework of this study. Bandura (1997) looks at people as being both the products and producers of their environment. The social cognitive theory looks at individual's thoughts and feelings as having a key part in the way an individual view the world. Human beings through their self-reflective thought are capable of evaluating their capabilities, surrounding environment, behaviour and future performances. Allport (1966) discusses the psychological concept of perception as a way we evaluate what we are familiar with. In Allport's view of perception the perceiver is the "judge". In this study in-service primary school teachers served as judges making judgement on their training and preparation in classroom questioning skills in primary teachers colleges of education. The theory for Allport was found suitable for the study as a theoretical framework because of the process that is involved in person perception.

1.10 Operational Definition of terms

Closed Question: A question that does not encourage extensive response on the part of the student; answered in just one or two words typically found in text.

Higher-level Cognitive Questions: can be defined as questions that require pupils to use higher order thinking or reasoning skills.

Lower-level Cognitive Questions: questions require the student to recall previously presented material.

Open Question: A question that encourages students to express and connect ideas in the text. This type of question encourages elaboration of ideas.

Perceptions: Views or opinions held by an individual resulting from experience and external factors acting on the individual.

Taxonomy: Taxonomy is a classification system used in a systematic way to classify questions.

Training: development of a variety of abilities and dispositions across the spectrum of human activity.

1.11 Organisation of the study

The study is divided into six chapters. The first chapter is the introduction and aims at giving an in-depth explanation of the problem that leads to the study. The study area, significance of the study and theoretical framework are explained. Key words are also explained in this chapter.

Chapter two is literature review. The study brings out relevant literature on teacher's perception, importance of teacher classroom questioning skills, typology of classroom questioning, training and preparation of teachers at primary teachers colleges and the relationship between teacher training and preparation and the type of classroom questioning used in classroom.

Chapter three discusses the methodology employed in the study. It outlines how the research was conducted in terms of its design, target population, research sample and sampling procedure, research instruments, data collection and analysis procedures as well as ethical considerations.

In the fourth chapter, research findings are presented in both qualitative and quantitative ways. Tables are used in the quantitative presentation of data.

The fifth chapter is discussion of the research findings presented in chapter four. The discussion is based on the themes upon which data was collected.

Finally, chapter six is conclusion and recommendations. The conclusion and recommendations are based on the findings of the study. The last part of the chapter gives suggestions for future research to prospective researchers. The pages that follow are for references and appendices.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

This chapter reviewed literature related to the present study on serving primary school teachers' perception of their training and preparation in classroom questioning skills in primary teachers colleges of education. The review started with past and present studies on teachers' classroom questioning. Thereafter, the review continued to be presented in the following order:

- i) The concept of primary school teacher's perception
- ii) Primary school teachers' classroom questioning and its importance
- iii) Typology of primary school teachers' classroom questioning
- iv) Relationship between primary school teacher's initial training and preparation and the type of classroom questioning used in classes.

2.2 Past and present studies on primary school teachers' classroom questioning skills

According to Chuan-bao (1997) classroom questioning skills has been used by primary school teachers as far back as the time of the Greek philosopher, Socrates and Confucius of ancient China. Socrates and Confucius developed and used classroom questioning skills so as to develop new knowledge and understanding, by bringing out contradictions and challenging assumptions. An American scholar called R. Stevens first conducted a systematic research on teachers' classroom questioning in 1912 and her findings were that teachers classroom questioning and pupils' response occupied 80% of the class time (Chuan-bao, 1997).

Ellis (1993) discussed that the first 50 years of research on classroom questioning skills focused on the description and evaluation of the usage of classroom questioning skills by the teachers. Ellis (1993) adds that the next 20 years sophisticated methods of systematic observation and analysis were developed to identify teachers' classroom questioning behaviour. The beginning of the 20th century up to early 1960s saw the change in research and it focused on identifying the association between teacher's classroom questioning skills and students' achievements.

The period of late 1960s to the early 1970s the focus of research changed to incorporate how to ask proper questions and then the late 1970s saw the focus of research on classification of teacher classroom questioning. From classification of teachers' classroom questioning, research changed to focus on the functions of the classroom questioning of the teacher (Kauchak & Eggen, 2001; Richards & Lockhart, 1988). Principles that are involved in teachers classroom questioning became an area of interest in research works on classroom questioning (Cole and Chan, 1994). The focus of research on teacher classroom questioning skills changed to teacher training and classroom questioning skills (Long & Crookes, 1987 in Ellis 1999) and teacher training and classroom questioning skills is still the focus of research on classroom questioning. The use of classroom questioning skills continues to be a vital aspect of classroom instruction that is only second to lecture method in popularity.

2.3 The concept of teacher perception

The concept of perception is claimed and defined in a number of different ways in different theoretical fields. Perception can be defined from physical, physiology and psychology. However for the purpose of this study the cognitive dimension of perception was considered as proposed by Kauchak and Eggen (2001). Cognitive psychologists view perception as a process in which people attach meaning to experience. Perception focuses on the way one thinks about something and one's ideas of what it is like, also the ability to understand the true nature of a subject especially as it affects our environment. Perception is closely related to the way of thinking or point of view. Perception can therefore be looked at as mental images that are a made of assemblage of impressions of events derived from past experiences and serve as the basis for future actions (Eisner, 1985; Hamilton, 1998). Perception appears to be linked to effective teaching practices. For example the perceptions that serving primary school teachers have on their training in classroom questioning skills in primary teachers colleges of education have been assembled from their training experiences and mental images have been the basis for their continued and future usage of classroom questioning skills.

According to research (e.g. Clark & Peterson, 1986; Kegan, 1992) the study of teachers' perceptions can be traced back in the late 1970s and the early 1980s and grew into a large body of research. Some researchers (e.g. Ashton, 1990; Brookhart & Freeman, 1992; Clark, 1988; Putman & Duffy, 1984) believed that since thoughts guides by behaviour, it is significant to have

knowledge of the perceptions and beliefs that teachers have as this knowledge would help in understanding how and why teachers behave in a particular way in classrooms and provide a guide for improving teachers' practices and pre-service teachers preparation and training. However, for several years, primary school teachers have been absent from educational research and policies and their voices were hardly heard in public (Dhunpath, 2000).

The perception that an individual has about something may be caused by present and past experience, individual attitudes at a particular moment, the physical state of the sense organs, the interest of the person, level of attention and the interpretation given to the perception, because of these experiences different people would react differently when they are from the same physical environment. They would not have the same experiences hence perception. This is true even with primary school teachers. Primary school teachers may perceive their training and preparation in classroom questioning skills in primary teachers training colleges in different ways as indicated above. Additionally, Protherough et al. (1989)'s observed that perceptions are continuously modified and reinforced by experience during training and in schools.

2.3.1 Relationship between Teachers' perception and classroom questioning practice

Thompson (1984) conducted a case study to investigate the relationship between teacher practice and their beliefs, perceptions and conceptions over a four week time period. This involved three major junior high school mathematics teachers. During the four week period the teachers were observed daily and interviews followed the observations. The result of the case study was that the beliefs, perceptions and conceptions teachers had about mathematics and its teaching played an important role in teacher's classroom behaviour. This study is in support of how perception influences the teacher's classroom behaviour.

Barcelus (1999) conducted a study on understanding teachers and students' language learning beliefs. This study by Barcelus concluded that teachers' perceptions may influence their actions in the classroom. These perceptions have a greater impact on the implementation of classroom questioning skills more especially when the teacher is faced with a specific challenge or problem.

Cross (2009) conducted a study involving five ninth-grade algebra teacher. The study used interview to collect data and the founding of this study was that teachers' perception were very influential on the teacher's daily practices.

2.3.2 Development of Teachers perception about classroom questioning skills.

Puchta (1999) at the plenary session of the LATEFL 33rd international Annual conference in Edinburgh, 64-72, presented a paper entitled "Beyond materials, technique and linguistic analyses: the role of motivation, beliefs and identity." In this paper Puchta discussed that learners formed their perception through the modeling of significant others and from frequent repetition experiences. Similarly, Huang (1997) conducted a study on Taiwanese senior high school students' EFL Learning: Focus on learning strategies and learning beliefs. Huang used interviews to collect data from the high school EFL students and the results were that students' perceptions were influenced by the significant others, who were teachers and other students.

Holec (1987) explained that learners who have been in traditional classrooms in which teachers managed all the activities in their class and the students' only responsibilities are "being taught" may not develop the ideas of how to manage or "self-taught" their own learning.

2.4 Teachers' classroom questioning skills and its functions

Research has shown that primary school teachers use more of classroom questioning skills in the class (Ellis, 1993). Questions are "the single most influential teaching act" (Taba et al., 1964). This shows that classroom questioning skills are the skills that primary school teachers like using in their classes. About 60% of classroom talk is occupied by classroom questioning and that nearly all questions are asked by teachers (Young, 1992). This further indicates that classroom questioning skills are the most common skills used by primary school teachers. Hunkins (1976) concludes that the question is of paramountwithout the question there is no processing of information.

At macro-level teachers' classroom questioning skills help in the promotion of learner-centered environment while at the same time maintaining a goal-focused activity, leading teaching away from the lecture methodology that is full of teacher talk occupying most of the class-time towards setting the stage and drawing students into dialogue (Jacobsen et al 1999). Many researchers (e.g. Kim & Kellough, 1978; Mac Donald, 1999; Burden & Byrd, 1998) showed that

classroom questioning skills can encourage dialogue, direct the flow of the lesson and promote discussion. This means that teachers' classroom questioning skills can be used as dialogue enhancers meaning that when a teacher uses his or her classroom questioning skills effectively there can be a switch from teacher-centered instruction to a learner-centered instruction.

Lee (2008) conducted a research basically aimed at analyzing the low-level questions that teachers used in their class lesson. This study was conducted in two universities in the United State of America. The sessions of this study were 20 hours on writing courses, six hours for speaking and ten hours from ten reading sessions. The results of this study indicated that most of the questions that the teachers used in their class lessons were used for interaction between them (teachers) and pupils.

Classroom questioning skills are a basic to good communication and lie at the heart of good interactive teaching, or dialogic instruction, though such communication in students' perspective remains remarkably restricted (Meighan, 1986) because teachers have the privilege to control over every aspect of instructional communications such as what to talk about, who to speak, when and how long to talk, etc.

Besides, the role of classroom questioning skills in establishing learner-centeredness, research also generalise major functions of questioning. For instance, Cohen et al (1996) summarise the significance of teachers' classroom questioning skills as: cognitive/intellectual (concerning the subject matter of the lesson), emotional/ social (to cater for different personalities) and managerial (to minimize bad behaviour and keep students on task). Similarly, Kauchak and Eggen (2001) grouped the importance of teachers' classroom questioning skills into three broad areas: diagnostic, instructional and motivational.

Pollard and Tan (1993) identifies two reasons why teachers' classroom questioning skills are so important and these are: psycho-social and pedagogic questions; psycho-social questioning centre on the relationships between children or between a teacher and other children by encouraging shy members or integrating by participation, showing interest in and value for group members, developing respect for each other's view and implementing routines and procedure. Pedagogic questions focus mostly on educational concerns, teaching and learning skills, attitudes, concepts and knowledge.

At the micro-level teachers' classroom questioning skills serves a lot of important factors. Teachers need to be informed about why they ask questions in classroom. Several studies have been carried out to search for the actual reasons for teacher classroom questioning. In Pate and Brener's study (1967), 190 elementary teachers were asked to provide reasons for asking questions and the results were: 69% emphasized the use of questions to checking understanding and knowledge to aid teaching; 54% stressed the recall of facts, and 10% highlighted the use of questions to encourage thinking in pupils.

Another study by Thanarrootoo (1981), cited in Brown & Edmondson, (1984) investigated on why experienced teachers use questioning in classes and the findings were that they asked questions test knowledge or maintain control. It appears that the majority of teachers do not exploit questions mainly for asking learners' higher thought processes overtime.

Brown and Edmondson (1989) investigated into the reasons for asking questions. The study reviewed teachers' reasons for asking questions varied according to the level of the class and subject being taught. The teacher with high ability class tended to use questions to gain attention and encourage thinking not frequently; teachers of medium-ability classes reported more checking and revision purposes in using questions, whereas low-ability classes were inclined to emphasise understanding, gaining attention to moving towards teaching points, management and revision. Among all the teachers in the sample, the most common reasons were: thought-provoking, comprehension checking, attention gaining, revision and management.

Tan (2007) conducted a research that was aimed at investigating teachers' questioning in nine universities in China. The study used observation, interview and the resulted showed that teachers used questions in class lessons to keep students attention and interest, comprehension and on classroom management.

Kauchak and Eggen (2001) identified classroom questioning as the most important skill in effective teaching. Through classroom questioning the teacher can help students form relationship, ensure success, involve reluctant students and enhance the involvement of an inattentive student and enhance self-esteem. Moreover, classroom questioning also help students maintain sensory focus, provide communication of concepts via repetition and is able to informally assess student understanding.

Hsu (2001) conducted a study that was aimed at examining classroom questioning within the input-output theoretical framework. The research consisted of two teachers and twenty-seven adult learners from the college. Twenty 50 minutes class periods were audio and video taped and then analysed. In this study both questionnaires and semi-structured interviews were used and the results were that teacher questioning were used as elicitation tools, attention drawing tools, corrective feedback, and as a scaffolding device in the development of language, cognition functions and self-regulation.

2.4 Typology of classroom questioning used by teachers

According to Richards and Lockhart (1988) teachers' classroom questioning can be classified in many different ways. Some researchers (e.g. Banbrook & Skeham, 1989) have observed that it is difficult to arrive at discrete and directly observable categories. However, much of the research work on classroom questioning has focused on the development of taxonomies that describe different genres. This means that researchers have developed many systems of classifying classroom questions using different standards. These standards encompass four areas: grammatical form, communicative value, content orientation and cognitive level. For the purpose of this study only the cognitive level of classroom questioning will be considered.

2.4.1 Cognitive level

Most of representative and influential taxonomies on questioning in education are Bloom et al (1956), Sander (1966), Guilford (1956), Gallagher & Aschner (1963). Besides, those pioneering taxonomies of questioning there are still others: Taba (1967), Laiser and Smith (1969), Herber (1978), Hyman (1979) built their taxonomies of questioning based on early classifications (Orlich et al., 1990; Orstein, 1995). Other researchers (e.g. Cunningham, 1971 cited in Gruenewald & Pollak 1990; Redfield & Rousseau, 1981 cited in Good & Brophy, 1991; Good & Brophy, 1991; Orstein, 1995; Arends, 1997; Jacobsen et al. 1999, etc.) distinguish high-/low-level questions, narrow/ broad questions or content/ process questions. The taxonomy of educational objectives as proposed by Bloom has been the widely used reference for cognitive questions. Bloom's taxonomy has been divided into "lower-order" questions and "high-order" questions. Bloom looked at lower-order question as comprising of knowledge, comprehension and application while high-order questions as comprising of analysis, synthesis and evaluation.

2.4.1.1 High-level classroom questioning

Golkar (2003) defines high-level classroom questions as those questions in which the teacher cannot predict the answer that the students would give. High-level classroom questioning is referred to as open-ended, interpretive, evaluative, inquiry, inferential complex, divergent, abstract, and conceptual and synthesis (Black, 2001). Wimer et al (2001) adds that high-level questioning encourages analysis, synthesis and application. Bloom, Englaehart, Furst, Hill and Krathwohl (1956) identified four levels in their taxonomy as being part of the high-level questioning and these are: application, analysis, synthesis and evaluation.

In the study of Rickards (1974) high-level classroom questioning by teachers were found to stimulate cognitive processing behaviour, which influence the recall of both relevant and incidental material. High-level classroom questioning by the teacher alert learners the interest that teachers have in what they think and not only what they know and can report about what others have said (Nystrand & Gamoran, 1990). In addition Golkar (2003) noted that high-level classroom questioning promotes more elaborate and expanded forms of interaction as well as involving learners in conversation. Moreover, high-level classroom questioning allows teachers to encourage learners in becoming more creative and analytical in their thinking (Croom & Stair, 2005).

According to researchers, about twenty percent of teachers' questions are high level questions (Brualdi, 1998; Gall, 1984; Kawanaka& Stigler, 1999; Newman, 1988). High-level questioning by the teacher invites learner to express their views, opinions or provide alternatives. This implies that the focus of high-level questioning is not on the correct answer.

2.4.1.2 Low-level classroom questioning

Low-level classroom questioning can be defined as questioning in which the teacher can predict the learners' answers before he or she can question (Golkar, 2003). This type of questioning has predetermined answers (Myhill& Dunkin, 2002). In addition low-level questioning is looked as procedural or knowledge based questioning that aims at addressing information. Low-level classroom questioning can also be called as closed, direct, recall, convergent and knowledge (Black, 2001).The low-level classroom questioning asks the learner to recall information and the answer that the learner gives to such questions are straight from memory (Wimer et al., 2001;

Gall, 1984). This is the common type of questioning used by teachers as pointed out by Steven (1912) in her study that in one secondary school with classes varying in grade levels and subject areas, four-fifths of the school time was occupied with question and answer recitations and that two-thirds of the teachers' questions required direct recall of textbook information.

Behnam (2008) conducted a research that was aimed at exploring the recurring pattern of questioning in the classroom. Behnam (2008) specifically wanted to find out the pattern of questioning behaviour of teachers and the effects of such behaviour on students. The study sample consisted of six classes at intermediate level in Iran. The participants were video and audio taped in their classes. The researcher was a non-participatory observer. The findings of this study were that teacher used lower-cognitive level questions in their classes.

Azerefegn (2008) conducted a research whose focus was on the type of teacher questions and questioning strategies in two private secondary schools in Addis Ababa, Ethiopia. The sample included the teachers of grade eleven classes and eight students from Keranyo Alpha secondary school and Saint Mary Catholic secondary school. The study employed classroom observation and questionnaire to gather necessary information for the research. The findings of this study were that teachers used (77.1%) of low-level cognitive questions and (22.9%) were from the high-level questioning domain. Azerefegn (2008) noted that most of the questions that the teachers asked were simple and required the student to retrieve information from their memory. Azerefegn recommend that much attention should be put on the development and implementation of questioning skills in teachers.

Dumteeb (2009) also conducted a study whose aim was to find out the teacher's questioning techniques and students' critical thinking skills in Thai context. This research was both qualitative and quantitative; therefore it used research instruments such as questionnaires and interview to collect data. The findings of this study were that the questions and questioning techniques that had been used in the class were mainly at the low level of cognition. From this research Dumteeb (2009) concluded that students' responses required low level of cognitive thinking and that such questions cannot develop in learners a critical mind. This is because low level cognitive questions require pupils to be involved in routine or mechanical application of previous memories and acquired knowledge and information.

Sungginwati and Nguyen (2013) researched on teachers' questioning in reading lesson in Indonesia. This was an explanatory research design that focused on teachers from the grade eleven classes. The researchers used interviews, observation and textbook analysis to come up with that data for the research. The results of this study were that teachers mainly used low-level cognitive questioning in their class lessons. Sungginwati and Nguyen (2013) observed in their findings that teachers had difficulties in framing and using of high-order questions. The failure to use high-order questions by the teachers can be attributed to lack of adequate preparation and training at colleges of education.

Perry, Vanderstoep and Yu (1993) did a comparative study of the first grade classroom in Japan, Taiwan and United States of America. They examined the types and frequency of questions asked by teachers. Perry, Vanderstoep and Yu (1993) wanted to found the difference between the questions asked in Asian classrooms and United States of American classroom. The result of the study revealed that all teachers in Asia and United States of America asked similar low-order questions that called for rote recall.

Similarly in a study among mathematics classrooms in Germany, Japan and the United States of America, Kawanaka and Stigler (1999) found that the emphasis in United States of America classrooms is still asking students to communicate already known procedures and principles rather than individual ideas and thinking processes.

Additionally, Matthiessen (2006) conducted a study to investigate teacher questioning and their effect on students' communication in middle school algebra mathematics classroom. The sample size of the study included three middle school mathematics teachers and was a case study type of a research. The method included videotaping of the lesson. Upon watching the videos of all the lessons, the results indicated that all teachers used more of lower-order questions in their classroom than high-order questions.

Nisa and Khan (2012) in their study set to investigate the questioning practices in a lower secondary co-education social studies classroom in a private school in Karachi. A qualitative method of data collection included observations, semi-structured interviews and focus group discussions were used. The result of this study was that teachers asked 60% of low-order questions in their lessons.

Nhlapo (1998) carried a case study on teacher's questioning in an English Second Language (ESL) classroom. The research adopted a non-participatory observation and interviews were conducted. The finding of this study was that most teachers observed used low-order questions than high-order question.

Ping and Butsakorn (2011) conducted a study which focused on teachers' questioning and students' critical thinking in a college EFL reading classroom. The study employed classroom observation and interview to collect data and 289 content-related questions were recorded and then classified according the cognitive domain of Bloom's taxonomy. The results indicated that the teacher asked more lower-cognitive domain questions (79.2%) than high-cognitive domain questions (20.8%). Ping and Butsakorn' study concluded that excessive use of lower-order questions does not facilitate critical thinking in students. They recommended that teachers need to be trained more on how to asked effective and appropriate questions.

In their study Khan and Inamullah (2011) aimed at exploring the levels of question teachers asked during teaching at secondary school level using bloom's taxonomy. The study was specially aimed at observing the ratio of lower-order and high-order questions. It was an observational study of descriptive method. The target population was made of all teachers working in Folks grammar school and college Peshawar. Twenty teachers of different subjects teaching at secondary level were randomly selected as a sample of the study. Teachers were observed using observation guide and audio recording. The results of the study were that teachers questioning occupied much of the class lessons and that lower-order questions occupied much of this time. The total percentage of questions in 445 minutes was 60%. Among 267 questions asked 90% were lower-order questions while 10% were high-order questions.

Ministry of Education (2009) conducted a survey in Zambian primary school and noted that most teachers depended to a larger extent on phrasing questions from the lower- bracket of cognitive domain. Most lessons observed showed that teachers concentrated on the first three levels of cognitive domain. The ministry of education (2009:32) concluded that "This would not help in the learning for sustainability and achieving the mission and goal of the education system"

Hussin (2006) conducted a study to investigate questioning as practiced in the Malaysia secondary school classroom. The study consisted of seven English language teachers and two intact classes of form 5 science teachers. This study employed in-depth naturalistic approach and

focused on everyday classroom events pertaining to question. The study found that the majority of the questions asked were at the lowest order and these questioning practices did not develop critical thinking in learners. The study also revealed that there was a mismatch between what has been stipulated in the curriculum and how teacher asked questions in their classes.

Black (2001) asserts that classroom interaction and discussions involve more than fifty percent of low-level questioning. This idea is supported by Myhill and Dunkin's study (2002) which found that low-level questioning by the teacher occupied sixty-four percent of the time in classroom instructions.

The above studies show that most classrooms operation devoid high-level-questioning as part of classroom procedures (Gallagher, 1985). In reality, "there are many classrooms in which teachers rarely pose questions above the read-it and repeat-level" (Wolf, 1997:1). Wilen (1982) noted that most of the teaching is spent on asking low-order-questions by teachers. These questions are mainly on factual /information that only require memorisation. These types of questions have limitation on the pupils as they do not help pupils acquire a deep, elaborate understanding of the subject matter (Nenty et al.; 2007). Ellis (1993) adds that many teachers depend so much on low-order question because they want to avoid slow-paced lesson, keep the attention of students and maintain control of the classroom.

However, it should be noted that research does not show that one type of classroom questioning is important than the other (Carlsen, 1991; Gall, 1984; Winne, 1979). For example in Winne's review (1979) of 18 experimental and quasi-experimental studies it was discovered that there were no differences in student outcomes whether the teacher asked more low-order questions or high-order questions. This shows that both low-level and high-level questions are important in that low-level questions establish students on the information base that will be used in high-order mental operations. Thought- provoking questions are the extension and elaboration of lower-order questions.

2.5 Teacher training and preparation

Teacher training is the primary indicator of quality education. It is the foundation of any educational system (Isyaku, 2002). Teacher training involves the development of several abilities in trainee teachers. Primary teacher colleges are of great importance because they are meant to

equip primary school teachers with habits of thought (how to think), dispositions (what to think), actions (what to do), skills (how to do), knowledge and attitudes that would make them effective teachers (Cruickshank and Metcalf, 1990). Davis and Davis (1998) looked at teacher training as a process through which skills are developed, information provided and attitudes nurtured.

However, primary teacher education is a challenge not only in Zambia but also in several countries of Africa. Kunje and Lewin (1999) conducted a study in Malawi on teacher training and preparation and found that the majority of lecturers in primary teachers training colleges were either secondary school teachers or primary school teachers who have been seconded to the college to train primary school teachers without any further training themselves. Kunje and Lewin (1999) added that the trend of Ministry of Education in Malawi was to identify a secondary school teacher or primary school teacher to become lecturer in primary teachers colleges of education. These teachers join the primary teachers colleges without thorough understanding the basics of classroom questioning skills and pedagogical content. This is the situation prevails in the Zambian primary education system and this creates problems because lecturers fail to draw from their experiences.

Although secondary teachers have no primary school teaching experience, they are expected to prepare the primary school teacher trainees to become effective primary school teachers. This arrangement is one of the contributing factors to poor classroom questioning among primary school teachers.

Haliza and Ling (2008) conducted a study on perception of TESL trainee in the university Technology Malaysia towards classroom delivery skills. The main focus of this study was on classroom questioning, explanation and demonstration. Data was collected through the use of questionnaires and interviews and the research involved 50 TESL trainees from faculty of Education. The results of this research showed that trainees were weak in several aspects of classroom questioning. These aspects included sequence of questioning, habitual repetition of questions, asking too many at a time. Haliza and Ling concluded that the lack in classroom questioning skills by trainees was due to lack of specific training in the field of classroom questioning.

Cotton (2001) reviewed that research that pre-service teachers are not given adequate training and preparation in developing classroom questioning skills and indeed that some receive no

training at all. This has been attributed to the syllabi which are over-crowded. The over-crowdedness of these syllabi is due to the attempt of including all knowledge required for a life time in the profession.

Nenty et al (2007) notes that a growing body of educational literature has challenged teacher educators to provide pre-service teachers with the knowledge and skills necessary to develop thinking skills and problem-solving skills in their students. This is because there is evidence suggesting that teacher educators do not model the culture of thinking in teacher preparation (Crukshak, 1990; Howsam et al, 1976; Orata, 1999). To this effect Underbakke et al (1993) suggest that teaching teachers to teach thinking must become one of the highest priorities of teacher education.

Thompson (1997) a lecturer at university of Liverpool noted that training teachers to ask questions has been the problem they have found to be difficult. Thompson (1997) added that there has been a tendency to assume that classroom questioning skills can only be picked through trial and error. He argued that most of the books on trainee teachers in colleges only deal with classroom questioning skills brief and incidentally if not at all.

Effective teachers need in-depth and broad based training and preparation in classroom questioning skills. This is because teacher's classroom questioning skills are essential skills of an effective teacher as they lead to the promotion of the development of thinking skills in school students. Therefore, teachers need the capacity to review the training and preparation they undergo in classroom questioning skills.

Educators are aware that most teachers are not skillful in questioning. Houston (1938) realising this developed an in-service training programme for the purpose of training teachers to ask good questions. The programme consisted of conferences, stenographic reports of each teacher's lesson, self-analysis and supervisory evaluation. At the end of the programme, teachers as a group increased the percentage of good questioning relevant to the purpose of the lesson from 41.6% to 67.6% and the percentage of questioning requiring manipulation of facts from 10% to 18%. This was in conformity with Ogunniyi's study (1979) who found that student teachers who had had some training in classroom questioning skills asked fewer factual and rhetorical questions and more thought-provoking questions than students who had no such training.

As Imogene and Carol (1990) indicated that educators recognize that teachers need to have expertise in the skill of asking questions. However, effective questioning skills require technical knowledge. Ideally this technical knowledge and the questioning skill should be acquired at the teacher education colleges. Therefore, it is important that the student teachers should be provided with the necessary experience, time and context to use effectively the techniques including questioning technique before they are involved in the teaching practice. However, Cotton (1988) stated that research shows that pre-service teachers are given inadequate training in developing questioning strategies and, indeed, that some receive no training at all. In a sense, teacher education programs have responsibilities to acquire such skills to pre-service teachers. As also pointed out in the research done by Uzuntiryaki and Boz (2007) teacher education colleges have very important roles in developing scientific skills in preservice teachers so that they become aware of the importance of these skills and try to improve their students' skills when they start teaching. This is also valid for questioning skills since preservice teachers should have acquired this.

2.6 Relationship between teacher training and the type of classroom questioning

Khan (2012) conducted a research on helping primary school teachers in mountainous valley of Chitral Pakistan to enhance students' learning through questioning. The research sample consisted of two primary school teachers who were trained and provided with technical support so that the participant could conceptualise and internalize the importance, types and techniques of effective classroom questioning. The results of this research indicate that there was a positive change in teachers' classroom practice as the research participants started to plan and execute interactive lessons through the use of questions.

Fazalur, Nabi, Yasmin, Saeed and Ajmal (2011) conducted a study on the relationship between teacher training and effectiveness of teaching in Islamabad. This was a descriptive research and involved questionnaires as the research instrument. The sample consisted of 80 female teachers and 180 girl students of grade 10. The results of this study showed that there was a positive relation of teacher training and effectiveness of teaching. The study recommended the introduction of quality teacher training programmes for teacher so as to improve their performances in class lessons.

Omaha (2010) researched on questioning effective professional development on questioning. The main aim of the study was on questioning skills in the mathematics classroom. The researcher discovered that professional development had a slight impact on teachers' knowledge and beliefs on the role of questioning and its impact on student discourse, engagement and conceptual understanding as well as some teachers questioning practices. The study by Omaha (2010) hinged on professional development and questioning skills but does not give us the perception of primary school teachers on their training and preparation in classroom questioning skills in primary teachers colleges of education.

Noel and Ernesto (2010) conducted a study on how to improve teacher training in poor countries. In their study, they observed that pre-service primary school teachers acquire the values, skills and habits from their lecturers. College lecturers are a product of large teaching culture. These have been classroom teachers and have received the skills and knowledge that is not available today. These are more likely to use lecture method or frontal teaching. It is important to expect therefore the method of teaching used by college lecturers would be reflected in their student teachers. Student teachers are more likely to use the same teaching skills that their lecturers used during their training as teachers.

Schwille, Dembe'le and Schubert (2007) in their study on global perspectives on teacher learning: improving policy and practice concluded that the impact of lecturers in teacher training colleges goes beyond the knowledge that they provide to teachers as it has been observed that teachers often teach in the same manner in which they were taught. This indicates that the way primary school teachers use their classroom questioning skills is closely related to the way their lecturers used the questioning skills during their class lessons.

Tekene (2006) conducted an action research on enhancing teachers questioning skills to improve children's learning and thinking in pacific island early childhood centres. The study consisted of 20 early childhood teachers and these teachers were trained on a modified model of question and understanding improves learning and thinking (QUILT). This training focused on different teacher beliefs and skills in the process of questioning. The study found that there was a significant change in the teacher's questioning behaviour in relation to the fostering of divergent thinking through the type of questions teachers asked and how they undertook the questioning

episodes. The study recommended that teachers should be trained in questioning skills so as to improve students' learning.

Shomoossi (2004) looked at the effects of teachers questioning behaviour on EFL classroom interaction. This was a qualitative-quantitative study that was conducted as a classroom research study done in Tehran universities in Iran and its focus was on comparing the usage of display and referential questioning. Forty classes were observed and study data were gathered through ethnography. The findings were coded and analysed. From this study it was found that teachers preferred display questioning to referential questioning. One of the reasons could be the training and preparation that these teachers went through in which they had an experience of display questioning rather than referential question. This study however did not bring out the perception that teachers have on their training and preparation in classroom questioning skills in primary colleges of education.

Brock (1986)'s research focused on an instructional experiment of the effects of closed and high-order questioning by teachers on pupils. In this study by Brock four teachers and twenty-four students were sampled. Two of the four teachers acted as an experimental group while the other two were a control group. The experimental group was provided with the treatment which was training in the formation and usage of high-order questions. After the treatment the experimental group was then evaluated in its use of high-order questions. The results showed that the experimental group formulated and used more of high-order questions than the control group. This study clearly shows the inter-linkage between the use of classroom questioning skills and the training offered.

Sitko and Slemon (1982) identified the importance of teacher training and preparation when they conducted a study on change in questioning practices of 20 elementary teachers from Ontario as they participated in a professional development experience on questioning. In this study, teachers participated for three-to- four week phases of professional development that was intended to enhance their categories and effective questioning techniques. The results of this study were that there was a significant increase in the percentage of high-level teacher questions as a result of professional development. Additionally an increase in effective classroom questioning by teachers was found in a Moyer and Milewicz (2002) descriptive case study of 48 elementary pre-service mathematics teachers. In this study by Moyer and Milewicz each participant conducted

an audio taped interviews with the child. Then data was analysed and the conclusion was that questioning skills need to be taught in teacher education courses.

Rogers (1972) trained student teachers in effective questioning techniques and found that those student teachers that participated in the training program were more conscious of questioning as a powerful instructional tool. Similarly, Buck (1997) found that simple techniques could improve student achievement. By training teachers to call on students by name, as opposed to a voluntary basis, Buck found significant gains by treatment subjects in course achievement.

Psencit (1971) conducted an experimental group that aimed at determining the effectiveness of an in-service programme that was concerned more on classroom questioning. The in-service training programme was to last for eighteen hours. The findings of this study indicated that in-service teachers who attended this training programme asked more high-order questions than lower-order questions. This research shows the importance and relationship that exist between training and effective questioning.

The study by Zoch (1971) aimed at comparing the effectiveness of two individualized training programmes for in-service teachers in kindergarten and first grade teachers. This was an experimental research where one group was an experimental group and the other a control group. Audio tape recording of thirty-four teachers in the experimental and control group was analysed in terms of cognitive level of questions they asked. Following the research analysis of tapes each teacher was given an individualized set of written instructions for improvement. Moreover, teachers in the experimental group received two hours of personal individualized instruction. Finding of this study indicated that the percentage of high-order questions increased for both groups but it was high for these in the experimental group. This study also brings out the importance of training teachers in classroom questioning.

Howard's (1970) study involved the development of materials for training teachers in appropriate questioning strategies in teaching reading comprehension. The use of questions that would promote higher-level cognitive processes was of particular emphasis. A control group and experimental group were both given reading passages for which the subjects were to write comprehension questions. The experimental group was given additional training in writing questions by working cooperatively. Analysis of pre- and post-tests determined that the

experimental group wrote significantly more critical reading questions. The conclusion was that question behavior could be improved through training.

2.7 Comment on literature

Although considerable research on teachers' classroom questioning skills has been done, the review of these research indicate that most of these research has been conducted in western countries. Literature on teachers' perceptions on their training in classroom questioning skills in primary teachers colleges in particular in the Zambian context are not known therefore requiring an inquiry to find out the perceptions of teachers on their training in classroom questioning skills.

2.8 Summary

This chapter presented a review of relevant literature on classroom questioning skills and provided an insight into how various scholars have conceptualized classroom questioning skills. The literature examined focused on various aspects of classroom questioning skills. A review of related literature showed that most of the existing research had focused on the following areas of classroom questioning: 1) functions of classroom questioning; 2) taxonomies of questions and frequency of type of questions; 3) frequency of questioning; 4) techniques or tactics of questioning; 5) pattern or framing of questions; 6) effects of classroom questioning in different study areas (Kauchak & Eggen, 1988; Lemlech, 1988; Arends, 1997); 7) the relationship between types of questions and their frequency and cognitive development (e.g. Orlich et al, 1994; Jensen & Kelly, 2000); 8) provision of tips to teacher practitioners on how to utilise questioning skills for effective learning (Cohen et al., 1996; kyriacou, 1997; Siyakhwazi & Siyakhwazi, 1999); 9) the effects of classroom questioning on pupils' learning and achievements in classroom content (Hunkins, 1969; Dillion, 1981; Redfield & Rosseau, 1981). However, studies on in-service primary school teachers perceptions of their training and preparation in classroom questioning skills in primary teachers colleges of education are not known hence creating a gap in our knowledge. There was, therefore need to investigate the perception in-service primary school teachers have on their training and preparation in classroom questioning skills in primary colleges of education.

CHAPTER THREE:

RESEARCH METHODOLOGY

3.1 Overview

This chapter describes the research design that was used as well as the target population, sample size and sampling procedure. It also outlined the data collection and data analysis procedures. The instruments that were used are also described in this chapter including the ethical consideration.

3.2 Research Design

A research design is an action plan or master plan of the research that throws lights on how the study is to be conducted, (Bell 2005). It aims at giving directions from the underlying philosophical assumptions to research design and data collection.

In this study, descriptive survey research design was employed. In broader term a research design is a blueprint that is used for conducting a study. It is a plan for describing how, when and where information is to be collected and analysed (Best 1970). Descriptive survey research design according to Best (1970) is a condition or relationship that exist, practices that prevail, beliefs, point of views, or attitudes that are held, processes that are going on, efforts that are felt, or trends that are developing. Descriptive survey research design provides a picture of a situation as it naturally occurs. It is concerned with how what exist is related to some preceding event that has been influenced or affected a present condition or event. Descriptive research designs provide useful data which can serve as a basis for further research using experimental design. In this study descriptive research design was used to provide a picture of the perceptions held by serving primary school teachers on their preparation and training in classroom questioning skills in primary teachers colleges of education.

3.2.1 Justification of the research design

The interpretive perspective was used in this study. Interpretive perspective does not agree with most of the assumptions of positivism. Positivists look at human behaviour as passive, controlled and determined by the external environment. According to positivism methodological procedures of natural science can be used in understanding of human actions. Interpretive perspective looks

at human beings as active creatures and has got feelings, attitudes, views and thought, (Gephart, 1999). Human beings are conscious and do not react to the external world but act. The behaviour of human being has got meaning. Knowledge and meaning are acts of interpretation, thus knowledge is not independent of thinking. Interpretive model seek to understand the situation as it is from the experience of individuals, (Aikenhead, 1997). Interpretive seek to make judgement, evaluation and refine theories. Interpretive approaches gave the research greater scope to address issues of influence. Interpretive approach provides a deep insight into the complex world of lived experience from the point of view of those who live it (Schwandt, 1994). This assertion is the justification for the researcher's choice of interpretive approaches.

3.2.2 Research Approach

This research was qualitative and quantitative in nature. According to Strauss and Corbin (1990) qualitative research looks at any research that does not produce findings that cannot be quantified. Qualitative techniques such as classroom observation and semi-structured interviews were carried out in this research. Qualitative data produces a rich broad of knowledge from the people being interviewed and observed. Patton (1989) argued that qualitative experiences, opinions, feelings and knowledge of people can be obtained through direct quotation and cannot be distorted by predetermined standardised categories. Bell (2005) adds that qualitative provides the researcher with an insight and understanding into the individual's perception of the world. Quantitative approach makes statistical analysis and generalisation possible. Therefore quantitative approach tries to verify, conform, proof and substantiate (Kombo& Tromp, 2006). The combination of qualitative and quantitative approaches was used for this study so that the research is enriched by the strength of qualitative and quantitative approaches and provides triangulation and answers the research questions guiding the study.

3.3 Target Population

A target population has been classified as including all the member of a given group to which end investigation is related (Pole & Lampard, 2002). The target population determines the limits within which the research findings are applicable. This study targeted all serving primary school teachers in Lukulu District of Western province.

3.4 Research Sample

The research sample consisted of 100 primary school teachers from the 20 sampled primary schools in Lukulu district of Western province. The sampled schools included Nyati, Njungu, Lyalala, Nangandu, Ngimbu, Chotela, Lyande, Lubosi, Lukulu, Namayula, Mulongo, Lutembwe, Luanchuma, Kasombo, Simakumba, Sitaka, Liyowelo, Lubuzi, Mwito and Kahuli.

3.4.1 Demographic

3.4.1.1 Location of the school

The study was conducted in Lukulu district and the majority of the sampled schools, 62 (62.0%) were located in rural area while 38 (38.0%) were in urban area.

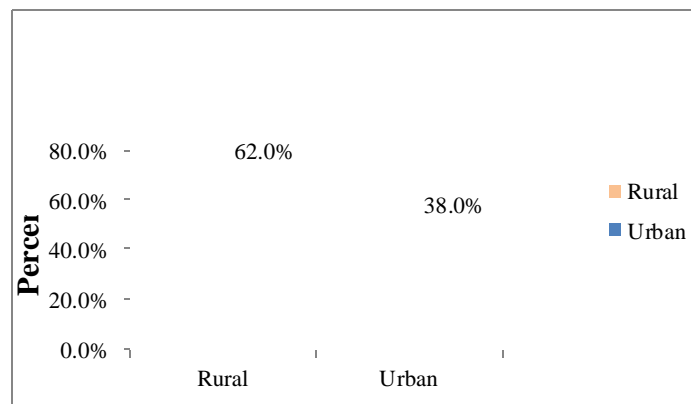


Figure 3.1 Location of the school

3.4.1.2 Gender of the respondents

Figure 3.1 below shows the gender of the teachers.



Figure 3.2: Gender of respondents

Figure 3.2 above shows that among the respondents that took part in this study, 60 (60.0%) were males while 40 (40.0%) were females.

3.4.1.3. Qualification of the respondents

Respondents were asked to indicate the highest qualification they possessed. The responses were illustrated in figure 3.3 below.



Figure 3.3: Respondent's qualification

Figure 3.3 above indicate that the majority of the respondents, 72 (72.0%) indicated that they had a certificate as their highest qualification whereas 28 (28.0%) said that they had diplomas.

3.4.1.4 Years of teaching of the respondents

Respondents were asked to indicate the years they have been teaching. The figure 3.4 shows their responses.



Figure 3.4: Number of years been teaching

Figure 3.4 above shows that the majority of the respondents 44 (44.0%) had been teaching for the period of 0-5 years, followed by 30 (30.0%) who had been teaching for the period been 6-10 years, then 14 (14.0%) had been teaching for the period of 16-20 years, eight had been teaching for the period of 21-25 and the last four indicated that they have been teaching for the period of 11-15 years.

3.4.1.5 Grades taught by the respondents

Respondents were asked to indicate the grade taught. Figure 3.5 shows their responses.



Figure 3.4: Grade levels currently teaching

Figure 3.4 above shows that the majority of the respondents (56) 56.0% taught from grade 1-3 while (44) 44.0% of the respondents taught from grade 4-7.

3.5 Sampling Procedure

Systematic random sampling strategy was used to choose the sample of the study. Black (2010) states that Systematic random sampling is based on selecting every “nth” from the sampling frame. The strategy of systematic random sampling is to start with at a random point and then select every “nth”. The judgment of systematic random sampling is to have a sample that will be spread across the population.

The registry department and human resource officer at the District Education Board Secretary were requested to help with a list of names of all primary school teachers in the district, which was used as a sampling frame. The list comprised of 300 primary school teachers and every third teacher was chosen as a sample. Five teachers were chosen from each school so as to make the sample scattered around Lukulu district and were followed to their respective schools for administration of research instruments.

3.6 Research Instrument

Three major research instruments that were used during the gathering of information for the research were questionnaires, semi-structured interviews and classroom observations. Questionnaires were used to collect quantitative data while observations and semi-structured interviews were used to collect qualitative data for this study. Semi-structured interviews were also used in this study to get the views of observed teachers.

3.6.1 Classroom observation schedule

Non-participant observation was used to collect data from the participants. Observation according to Best and Kahn (1998) consist of detailed notations of behaviour and events, and the contexts surrounding the events and behaviour. In this research the researcher was an observer or what Manion and Cohen (1980) and Bell (2005) called a non-participant observer. This has a prime advantage of observing and understanding natural human behaviour and actions in a real-life setting and to discern on-going behaviour as it occurs and in the process appropriate notes about its salient features (Best & Kahn, 1998; Manion& Cohen, 1994; Bell, 2005). Both McMillan and Schumacher (2006) and Bell (2005) agree that observation reveals characteristics and elicit data that is nearly impossible with other means or approaches. Non-participant observation enables the researcher to closely record what was observed, undisturbed as

participation in the activity would have disturbed the researcher from data collection exercise (McMillan & Schumacher, 2006).

3.6.2 Questionnaires

Questionnaires were one of the major instruments used to collect the data for this research project. Leedy and Ormrod (2005) argue that questionnaires offer respondents the benefit of answering questions with the promise of anonymity for their responses. Questionnaires are quick and convenient and it was not likely for them to misinterpret the questions and give misleading answers. Questionnaires were administered to 100 serving primary school teachers. This helped to collect quantitative information regarding primary teachers' perceptions of their training and preparation in classroom questioning skills in primary teachers college of education in Lukulu district. The questionnaire consisted of both closed and open-ended questions. The questionnaire consisted of sections A and B. Section A of the questionnaire required the respondents to provide the bio-data which included name of the school and location, gender, professional qualification, grade taught and years of teaching. Section B of the questionnaire included filter questions, open and closed ended questions.

3.6.3 Semi-structured interviews

Semi-structured interviews were also used to collect data for this study. According to Mangal (2008) an interview gives a research a chance of getting information directly from the interviewee about his or her behaviour in a face to face contact or relationship. The researcher and respondent get involved in a mutual exchange of ideas and information. The researcher makes an appointment with the subject whom behaviour is to be investigated. In this research semi-structured interviews were used. According to Kombo and Tromp (2006) semi-structured interviews are involves the use of an interview guide that consist of topics that need to be covered in an interview. The interviews consisted of oral questions asked by the interviewer and oral responses from the research participants.

As the respondents spoken in their own words the interviewer recorded their responses using digital audio recording device. The interviews were then transcribed verbatim. The researcher also recorded some of the responses by writing on a notepad. Interviews are one of the methods

in qualitative research that brings out the feelings, thoughts, views and attitudes as these attributes cannot be observed (Patton, 1986).

3.7 Piloting the research instruments

Piloting of the research instrument was done at Lishuwa Basic in Lukulu district. Piloting of the research instruments involves exposing of a few cases that are similar to the cases that would be used for the main research Strydom (2002).

The piloting of the questionnaires, interview guide and classroom observation schedule was done so as to test their validity and reliability. Rosnow and Rosenthal (1999) state that piloting of research instruments assist in the development of research instruments. Ten teachers were randomly sampled to answer the questionnaires and be observed in their classrooms. The piloting of the research instruments provided the research with the insights into the internal consistency of the questions and was necessary rephrasing the questions that may appear inappropriate to bring out the expected results. After analysis of the responses the research came up with questionnaire and classroom observation schedule.

3.8 Data Collection

Primary data was collected by means of semi-structured interview, questionnaires and classroom observations. Questionnaires were administered to 100 primary school teachers. Classroom observation schedules were administered to 25 primary school teachers and semi- structured interviews were conducted to the 25 primary school teachers after classroom observation. Secondary data was sought from library books, periodicals, lecture notes, published as well unpublished dissertations and the internet.

3.9 Data Analysis

The statistical Package for Social Sciences (SPSS) was used to analyse quantitative data. Questionnaires were given numbers and entered into the SPSS programme. Closed and open ended questions were given numerics and then entered into SPSS. The descriptive analysis of the SPSS was used in the presentation of frequencies and percentages for each item on the questionnaire. The results were then presented in figures and tables. Qualitative data was analysed by grouping it into categories according to emerging themes.

3.10 Ethical Considerations

This research compiled and conformed to ethical codes, guidelines, protocols and practices. Before entry in the research sites permission was solicited from the District Education Board Secretary to use the schools for research. At the school level permission was solicited from the Headteachers.

The researcher explained honestly and openly to all participants about the nature, aims and purpose of the study and further elaborated to the participants that participation in this study was voluntary. In this research compliance to ethical issues of confidentiality, anonymity and privacy was highly considered. To ensure confidentiality names of the interviewees were not disclosed; names of the school, teachers and headteachers remained anonymous and not appear in the research report. The data gathered in this research was solely and strictly be used for this research project.

3.11 Summary

This chapter focused on the approaches that were used for data collection and data analysis for the study. The chapter also gave the basis on which the data collection and analysis were chosen. The desire to provide a wide and clear answer to the research problem facilitated the choice of the research design. The research used a combination of qualitative and quantitative research instruments. The chapter further explains the procedures for analysis of data from the field.

CHAPTER FOUR: PRESENTATION OF RESEARCH FINDINGS

4.1 Overview

This chapter presents findings of the research on serving primary teachers' perceptions of their training and preparation in classroom questioning skills in primary teachers colleges of education in Lukulu district of Western province. The presentation of the findings is done under the headings drawn from the objectives of the research. The information presented in this chapter is organised into two that is, the findings from the questionnaires and semi-interviews and the findings obtained by the use of classroom observation surveys.

4.2 Finding from the questionnaires and interviews

This section is a presentation of the research findings obtained using questionnaires and interviews from serving primary school teachers in sampled schools on their perception of their training and preparation in classroom questioning skills in primary teachers' college of education in Lukulu district of Western province.

4.2.1 Teachers have heard of classroom questioning skills

Respondents were asked to indicate whether they had ever heard of classroom questioning skills. Their responses were as shown in Figure 4.1 below.

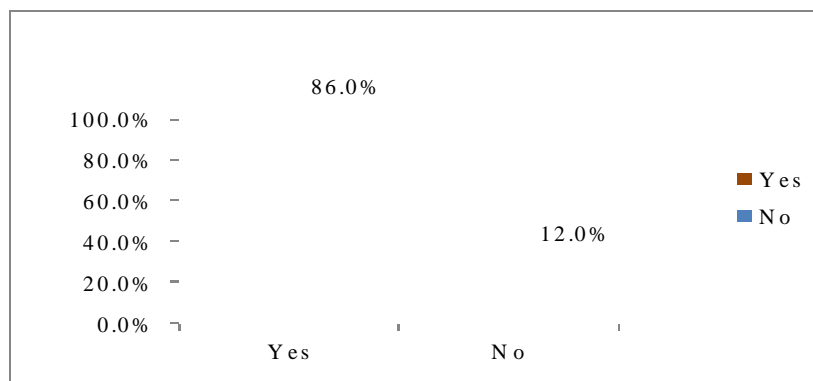


Figure 4.1: Teacher have ever heard of classroom questioning skills

Figure 4.1 above shows that the majority of the respondents, 86 (86.0%) of the respondents indicated that they had heard of classroom questioning skills while only 14 (14.0%) of the respondents indicated that they had never heard of classroom questioning skills.

For the respondents who answered in affirmative, a further question was asked to them to indicate the sources of their information. Figure 4.2 below shows their reactions.

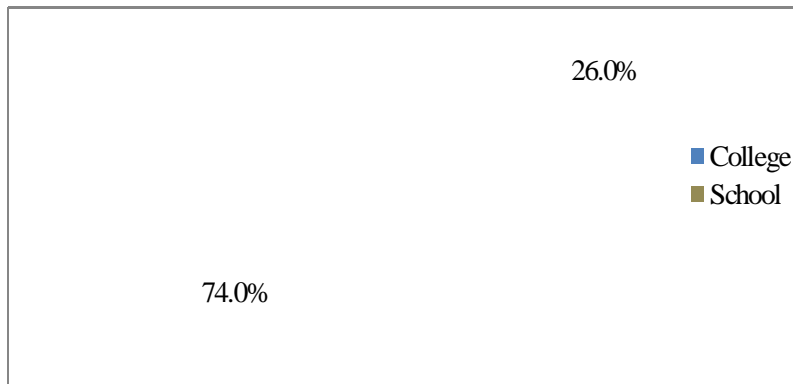


Figure 4.2: Teachers' sources of information on classroom questioning skills

The results as shown from Figure 4.2 above indicates that the majority of the primary school teachers 64 (74.0%) had heard about classroom questioning skills at school during their full time teaching post, whereas 22 (26.0%) indicated that they had heard about classroom questioning skills at college during their preservice training.

4.2.2. How teachers heard classroom questioning skills

Primary school teachers who indicated that they had heard of classroom questioning skills in school were further asked to indicate how they heard about classroom questioning skills. Table 4.1 below shows the responses of the respondents.

Table 4.1: Frequency of distribution of teachers’ sources of information on classroom questioning skills

Responses	Frequency
Teacher Group Meeting	54
Reading books	42
Workshops	50
Observing friends	14
Experience in teaching	20
Talking to friends	16

Table 4.1 above shows that most of the responses from the respondents were that they heard of classroom questioning skills from Teacher group meeting (TGMs) with 54, followed by responses that indicated workshops with 50, then 42 of the responses indicated reading books, and 20 of the responses indicated through experience in teaching, 16 of the responses indicated talking to friends. The least were those 14 responses which indicated observing friends.

4.2.3. Teachers understood classroom questioning skills

Respondents were asked to indicate whether they understood what was meant by classroom questioning skills. Their responses were as shown in figure 4.3 below:

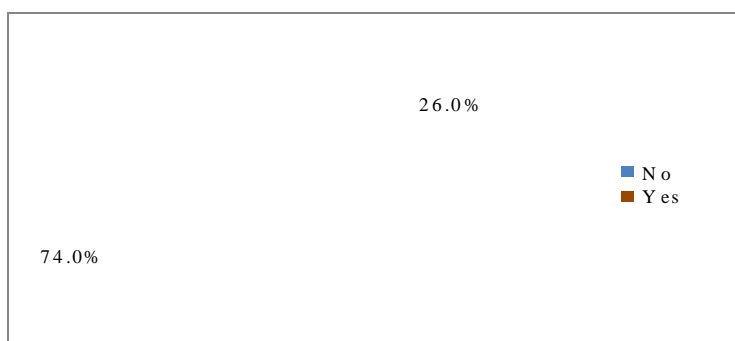


Figure 4.3: Teachers had heard or learnt of classroom questioning skills

The figure 4.3 shows that the majority of the respondents 74 (74.0%) indicated that they understood what was meant by classroom questioning skills while 26 (26.0%) of the respondents indicated that they did not understand what was meant by classroom questioning skills.

For primary school teachers who indicated that they did not understand what was meant by classroom questioning skills, a further question was asked to them to indicate the reasons as to why they did not understand what was meant by classroom questioning skills. Table 4.2 below shows their responses.

Table 4.2: Reasons given for not understanding what was meant by classroom questioning skills

Responses	Frequency
I did not learn about them at college	26
No topic was covered on classroom questioning skills	26
Total of responses	52

Table 4.2 above shows that the respondents did not learn about classroom questioning skills at college. Additionally they indicated that no topic on classroom questioning skills was covered during college period. However, they did not indicate that they had either little knowledge about classroom questioning skills or that they had forgotten learning about classroom questioning.

4.2.4 How often teachers use classroom questioning skills

Primary school teachers were asked to comment on how often they used classroom questioning skills when they were teaching a lesson in their classes. Figure 4.4 shows their responses.

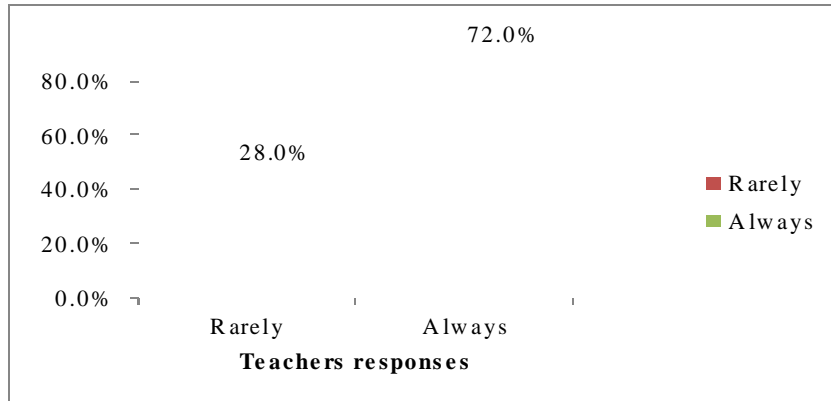


Figure 4.4: How teachers use classroom questioning skills in their class lessons

Figure 4.4 above shows that the majority of the respondents, 72 (72.0%) indicated that they always used classroom questioning skills while 28 (28.0%) of the respondents indicated that they used classroom questioning skills rarely.

4.2.5 Teachers were not comfortable with their classroom questioning skills

Primary school teachers were asked to indicate how comfortable they were with their classroom questioning skills. Figure 4.10 below shows their responses.

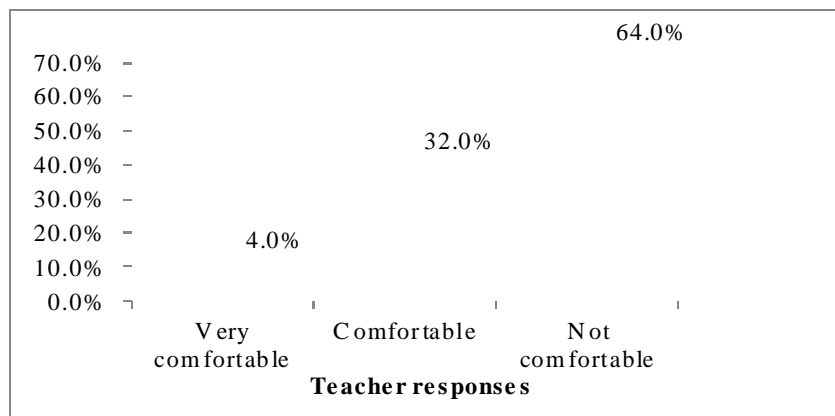


Figure 4.5: Teachers were not comfortable in using classroom questioning skills

It was established from figure 4.5 above that the majority of the respondents 64 (64.0%) were not comfortable with using classroom questioning skills and 32 (32.0%) of the respondents indicated that they were comfortable in using classroom questioning skills. The least four were those who indicated that they were very comfortable with classroom questioning skills.

4.2.6 Teachers were not adequately trained and prepared in classroom questioning skills in primary teachers colleges

Respondents were asked to indicate with a “yes” or “no” response on whether they thought that they were adequately prepared and trained in classroom questioning skills at primary teachers college. Figure 4.5 below shows the responses.

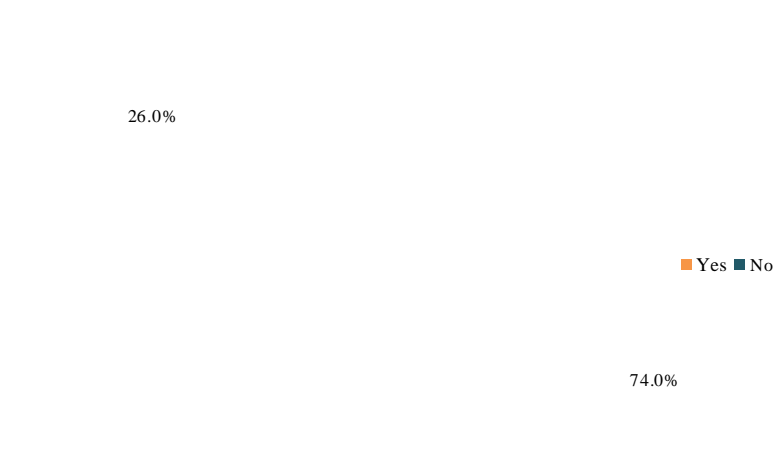


Figure 4.6: Teachers were not adequately trained and prepared in classroom skills in primary teachers colleges

Figure 4.6 above shows that most of the primary school teachers 74 (74.0%) indicated that they were not adequately trained and prepared in classroom questioning skills at primary teachers college while 26 (26.0%) of the respondents indicated that they were adequately trained and prepared in classroom questioning skills in primary teachers colleges.

Primary school teachers who indicated that they were not adequately trained and prepared in classroom questioning skills in primary teachers colleges were further asked to indicate the reasons why they felt they were not adequately trained and prepared in classroom questioning skills. Table 4.3 below show their responses.

Table 4.3: frequency distribution of reasons why teachers felt that they were not adequately trained and prepared in classroom questioning skills

Reasons	Frequency
Classroom questioning skills were haphazardly picked.	38
Lecturers only gave a skeletons on teaching skills	24
No topic on classroom questioning skills was covered	52
Little time spent on classroom questioning skills	46
Little attention made to classroom questioning skills.	40
Overcrowdness of the syllabuses	62

The table 4.3 above shows that among the responses given by respondents, 62 of the responses indicated overcrowdness of the syllabuses in primary teachers training colleges. This was followed by 52 of responses that were indicative of no topic on classroom questioning skills was covered. Then 46 responses showed that little time was spent on classroom questioning skills and 40 were responses on little attention made to classroom questioning skills. Other responses were that classroom questioning skills were haphazardly picked at 38 and lecturers only gave a skeleton on the teaching skills at 24.

Some respondents interviewed informed the researcher that they felt were not adequately trained and prepared in classroom questioning skills in primary teachers colleges of education. It was also reported that primary school teachers were not fully trained and prepared in classroom questioning skills because of overcrowded syllabuses. Teacher one (T1) was a female teacher that has been in the teaching profession for five years. She holds a primary teachers certificate and was teaching a grade three class. When interviewed she said:

I fell that I was not adequately trained and prepared well in classroom questioning skills at college. No one taught me how to ask questions at college, all I have was through teacher group meetings we have attended at school.

4.2.7 Teachers had heard of low-order and high-order classroom questioning skills

Primary school teachers were asked to indicate a “yes” or “No” on whether they have ever heard of low-order questioning and high-order questioning. The figure 4.7 below shows their responses.



Figure 4.7: Teachers have ever heard of Low order and High-order questioning skills

Figure 4.7 above shows that majority of the respondents 78 (78.0%) indicated that they had ever heard of these questions while 22 (22.0%) of the respondents indicated that they had never heard of low-order questioning and high-order questioning.

For the respondents who answered in affirmative, a follow-up question was asked to them to determine where they had learnt about low-order questions and high-order questions. The Table 4.4 shows their responses.

Table 4.4: Frequency distribution of teachers’ sources of information on Low-order and High-order questioning

Sources of information	Frequency of the responses
College	36
Friends	18
Teacher Group Meeting	56
Workshops	38
Reading of books	38

Table 4.4 above indicated that the responses of those who learnt about low-order questions and high-order questions through teacher group meetings were 50 , while 38 of the responses indicated workshops and reading of books, 36 of the responses indicated college and 18 of the responses indicated from friends.

4.2.8 Teachers preferred low-order to high-order classroom questioning skills

Respondents were asked to indicate which type of classroom questioning they preferred between low-order and high-order questioning. The figure 4.8 below shows the responses.

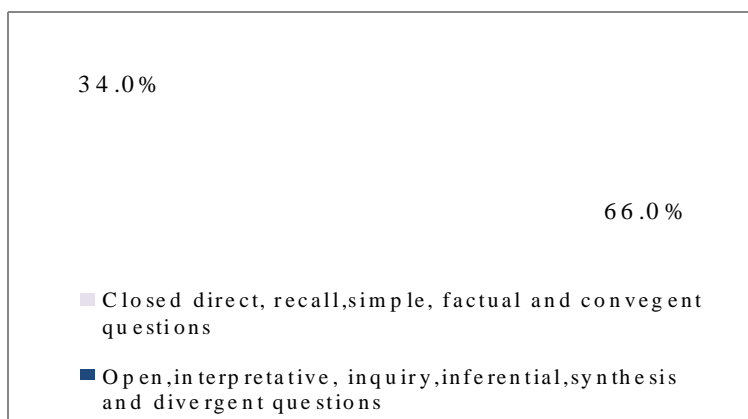


Figure 4.8: Preference of teachers preferred low-order to high-order classroom questioning skills

As can be established from the figure above all the respondents responded to the question and it can be seen that 66 (66.0%) indicated that they preferred using questions that are closed, direct, recall, convergent, simple and factual (Low-order questioning) in their classrooms while 34 (34.0%) indicated that they preferred using questions that are Open, interpretative, evaluative, inquiry, inferential, divergent and synthesis (High-order questioning). The excerpt below show some of the questions that one teacher asked in the class. The teacher was teaching a literacy lesson to the grade two pupils.

Teacher: what is the date today?

Pupil: silence

Teacher: Who can tell us what we learnt yesterday?

Pupil: silence

Teacher: Yes John, what did you we learn yesterday?

Pupil: Sound 'b'

Teacher: Good John, shall we look at the picture all of us?

Pupils: silence

Teacher: Ok, what can you see in the picture?

Pupils: silence

Teacher: Sileta, what can you see in the picture?

Sileta: I can see a teacher.

Teacher: Anything else, sibamba?

Akapelwa: I can see father.

In another classroom observation a grade seven teacher asked part the following questions were in a mathematics lesson:

Teacher: who can guess the day today?

Pupils: silence

Teacher: Monde, can you tell us what the date is today?

Monde: its 12th July, sir.

Teacher: What is the opposite of subtraction?

Pupils: addition

Teacher: what is negative twenty plus positive five?

Pupil: positive twenty-five sir

Teacher: what?

Pupils: silence

Teacher: negative twenty-five or negative five?

Pupils: silence

Teacher: so, you cannot remember what we did?

4.2.9 Reasons for their preference of low-order to high-order questioning

Respondents were asked to give reasons why they preferred using such type of questions in their classes. The table 4.5 below shows their responses.

Table 4.5: Frequency distribution of reasons for their preference between Low-order and High-order questioning

Responses	Frequency
Retrieval of information	60
prepare learners to think critically	38
Easy to prepare	60
For assessment or Measurement of learners ability	28
Not time consuming	46
Have one correct answer	60
Checking for knowledge	64

The table above shows that a frequency of 64 responses were for checking of knowledge, then 60 represented responses on retrieval of information, such questions are easy to prepare and that these questions have one correct answer. These were followed by 46 of the responses that showed that these questions are not time consuming in preparation and answering. 38 of the responses indicated that these questions were used for preparation of learners for critical thinking lastly 28 indicated that they are used for assessment or measurement of learner's abilities.

Some serving primary school teachers reported that they used much of low-order questioning than high-order questioning in the classroom. It was reported that serving primary school teachers preferred low-order questioning to high-order questioning because of the nature of the syllabuses. It was noted that low-order questions were easy to prepare and that enabled a wider coverage of course content. Teacher two (T2) a male teacher with a certificate in primary teaching and was teaching a grade five class. When teacher two was interviewed he said:

... In fact low-order questions are not complicated and are easy to prepare and answer. After all teaching in Zambia is content-based and transmission of knowledge. Pupils need to pass examination thus low-order questions are the best. The examination is all about Low-order question, why should I take trouble using high-order question to waste time.

During the interview session respondents justified their use of low-order questions. One respondent said that:

...I think there is nothing you can do as a teacher unless you recall. So the questions I asked were meant for pupils to recall the information they learnt. When I use all type of questioning at once, then I shall not finish the syllabus. You know pupils need to finish the syllabus for them to pass.

4.2.10 The type of classroom questioning used by teachers was related to the training and preparation at colleges of education

Respondents were asked to indicate if they thought that the type of classroom questioning they use in their classes was related to the way they were trained and prepared in primary teachers college. Figure 4.9 below shows their responses.

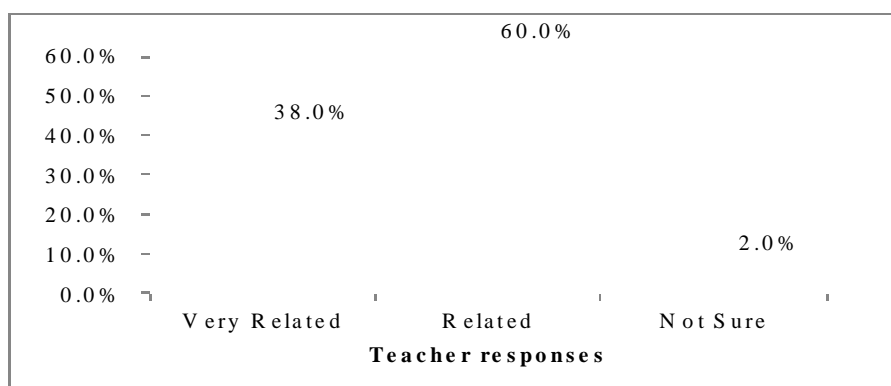


Figure 4.9: Relationship between the types of classroom questioning and the way of training at primary teachers colleges.

Figure 4.9 above shows that 60 (60.0%) of the respondents indicated that it was very related, then followed by 38 (38.0%) of the respondents who indicated that it was much related. Only two respondents indicated that it was not related.

For the respondents who answered positively, a further question was asked to them to indicate the reasons of their answer. Table 4.6 shows their responses.

Table 4.6: Frequency distribution of reasons teachers gave regarding the relationship between the type of classroom questioning they use in class their training and preparation in Primary teachers colleges

Responses	Frequency
They tally with the way we were taught at college	98
No topic on classroom questioning was covered	52
Lecturers' teaching style act as a mirror to student teachers	40
Total of the responses	190

Table 4.6 above shows that 98 responses from teachers indicated that the type of classroom question they used in class tallied with the way they were taught at college, 52 indicated that no topic on classroom questioning was covered and 40 indicated that the way they use classroom questioning skills is the same teaching style of their lecturers in primary teachers colleges.

Some serving primary school teacher reported that the way they used their classroom questioning skills was related to the training and preparation the received in primary teachers colleges of education. It was reported that lecturers were their role model in the teaching styles. Teacher three (T3) a female teacher with a diploma in primary teacher was teaching a grade seven class and when interviewed she said:

The way you saw me asking questions is the exactly way our college lecturers do it. They do not use questioning that require high think in students. So these are the people students look up to because their skills

are reflected in us. You cannot tell someone not to follow what you are doing but what you say.

4.2.11 Primary teachers colleges of education are not doing enough in preparing and training teachers in classroom questioning skills

Primary school teachers were asked to evaluate if primary teacher colleges of education were doing enough in training and preparing teachers in classroom questioning skills. Figure 4.10 below shows their responses.

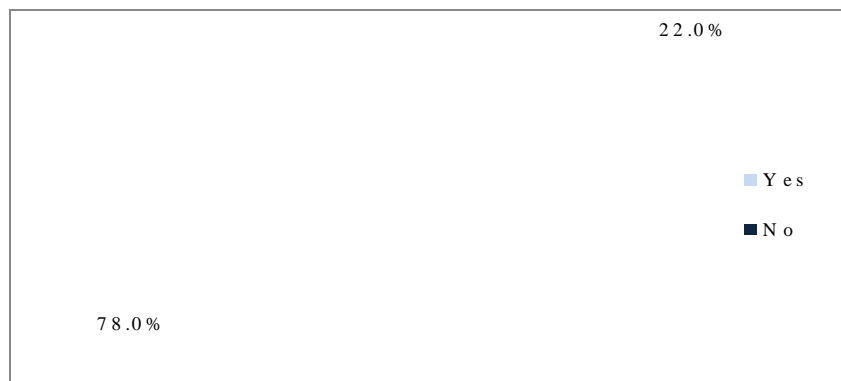


Figure 4.10: Primary teacher colleges are not doing enough in training and preparing teachers in classroom questioning skills

From figure 4.10 above 78 (78.0%) of the respondents indicated that primary teacher colleges of education were not doing enough in preparing and training primary school teachers in classroom questioning skills while 22 (22.0%) of the respondents indicated that primary teacher colleges of education were doing enough in preparing and training primary school teachers in classroom questioning skills.

Respondents who indicated that primary teacher colleges were not doing enough in training and preparing primary school teachers in classroom questioning skills were further asked to indicate the reasons for their answer. Table 4.7 below shows their answers.

Table 4.7 Frequency distribution of reasons why primary teacher colleges are not doing enough in training and preparing teachers in classroom questioning skills.

Responses	Frequency
Haphazard change of programmes in primary teacher education	62
Syllabuses are overcrowded	78
Short period of time for training of primary school teachers	26
Qualification of lecturers in private colleges	30
lecturers in primary colleges not fully trained in classroom questioning skills	42

Table 4.7 above indicates 78 of the responses showed that overcrowdness of syllabuses in primary colleges of education contributed to poor training and preparation of primary school teachers, then 62 of the responses indicated that haphazard change of programmes in primary teachers education contributed to poor training and preparation of teachers in classroom questioning skills, this was followed by 42 of the responses which indicated that lecturers in primary teachers colleges were not fully trained in classroom questioning skills. 30 of the responses indicated that the qualification of lecturers in private primary teachers colleges contributed to poor training and preparation of primary school teachers in classroom questioning skills and lastly 26 of the responses indicated that the short period of time for training and preparation of teacher was also contributing factors.

It was reported from the interviews conducted that primary teachers colleges of education were not doing enough in the preparation and training of primary school teachers in classroom questioning skills. Some serving primary school teachers reported that a lot of changes that take in the primary education sector are the factors that contribute to poor preparation of teacher. Teacher four (T4) was a male teacher with a diploma in primary teaching and was teaching a grade two class and when interviewed he noted:

...the integration of subjects has really made things worse, subjects are done a shallow meaning teacher are not fully prepared and trained. Look I learnt most of

the skills about teaching at school through trial and error which was not supposed to be the case.

Teacher five (T5) a female teacher with a certificate in primary teaching and teaching grade six was interviewed and she said:

There has been a drop of quality in primary teacher colleges of education. The changes in teacher curriculum, over crowdedness and poor quality of textbooks have contributed to half-baked teachers we have in these schools.

4.3. Findings from classroom observation

These findings describe the information which was obtained using observation sheets on teachers' perceptions of their training and preparation in classroom questioning skills in primary teachers' colleges in Lukulu district of Western province. The findings comprise the quantities of questions teachers asked in a 40-minute class period as well as the type and the cognitive requirements of the questions asked by the teacher.

4.3.1 Quantity of classroom questions asked by primary school teachers

Table 4.8 below shows the quantity of questions which were asked by 25 observed teachers in a 40-minute class period. Questioning categorisation is based on Bloom's low-order and high-order categorisation.

Table 4: 8: Low-Order questions and High-order questions

Teacher ID	Question type	
	Low-order questions	High-order questions
a	67	5
b	70	4
c	60	7
d	65	6

e	60	3
f	65	-
g	66	2
h	65	4
i	66	-
j	63	5
k	70	-
l	64	8
m	71	2
n	68	5
o	69	4
p	69	1
q	62	-
r	60	6
s	67	7
t	60	-
u	59	3
v	70	3
w	65	8
x	67	4
y	69	-

Table 4.8 above shows that the respondents asked more of low-order questions than higher-order questions. The respondents asked 60-100% low-order questions and 0-10% of high order question in a time space of 40 minutes.

4.4 Summary

The data presented in this chapter was organised into two parts that is, findings from the questionnaires and interviews and findings from classroom observations.

The findings from the questionnaires also revealed that most in-service primary schools teachers had heard of classroom questioning skills at school during the full time teaching job. Furthermore, it was established that most in-service primary school teachers rarely used high-order classroom questions. The findings from questionnaires and interviews also revealed that most in-service primary school teachers perceived their training in classroom questioning skills in primary teachers colleges of education as not been adequate. And that the type of classroom questions they used in their class lessons was related to the way they were taught at school. The findings from the classroom observation also established that most in-service primary school teachers use a lot of low-order questions than high-order questions. Additionally the cognitive operation of children was at the low level because of the usage of low-order questions. It was also discovered that the respondents did not prepare the questions to ask in class lesson in advance.

CHAPTER FIVE:

DISCUSSIONS OF FINDINGS

5.1 Introduction

This chapter presents the discussion of the findings on serving primary school teachers' perceptions of their training and preparation in classroom questioning skills in primary teacher colleges of education in Lukulu district of Western province. Data was collected on the relevant variables through the use of classroom observation schedules, self-administered questionnaires and semi-structured interviews. The discussion follows the key variables upon which data was collected.

5.2 Teachers were not adequately trained and prepared in classroom questioning skills in primary teachers college of education

The majority 74.0% felt they were not adequately prepared and trained in classroom questioning in primary teachers colleges of education. Training and preparation in Classroom questioning skills is important because classroom questioning skills are central to classroom teaching, interaction and learning yet classroom questioning are the most neglected skills (O'Neill, 1991). Through training and preparation in colleges primary school teachers become equipped with knowledge and skills and their perception become moulded. This indicates that every Primary school teacher needs more training and preparation in classroom questioning. This is in line with Thompson (1997) and Ellis (1990) who asserted that there is need to train and prepare teachers on how to ask questions in a classroom lesson. The way a teacher uses his or her classroom questioning skills in the classroom cannot be detached from the training and preparation he received.

During the interview most respondents perceived their training and preparation in classroom questioning skills in primary teachers colleges of education as not being adequate. One of the interviewee said:

*...Yes, I was not adequately trained and prepared on classroom questioning skills.
I think there is no college or course on classroom questioning skills.*

The questioning skills I have are as a result of observing my fellow teachers asking questions. Most of us teachers we like observing our friends teaching and that's how we acquire these skills.

In this excerpt the respondent seems to indicate that the training and preparation in classroom questioning skills he underwent in primary teachers college of education was not adequate. The respondent went further to indicate that there is no college or course that a teacher can go to or take so as to learn classroom questioning skills. This simply shows how ill-prepared and trained a primary school teacher is in classroom questioning skills. The respondent indicates that the skills that he has in classroom questioning are as a result of observing fellow teacher teaching in their classrooms.

Given the above responses, the respondents were further asked to give reasons why they felt that they were not adequately trained and prepared in classroom questioning skills in primary college of education. There were a number of reasons that primary school teachers expressed that were hinderous to their adequate training and preparation in classroom questioning skills.

First, the overcrowdness of the syllabuses at primary school teacher training colleges as noted by Eraut (1994) was obvious in this study. Most primary school teachers (23.7%) who participated in this study revealed that they did not learn of classroom questioning skills at college because there was too much work to cover in the short period of time. The many parts in the curriculum are sources for omissions and inadequacies. Primary Teacher Colleges offer a lot of subject in what has been named as study areas. The study areas bring several related individual subjects into one area. For example, the study area such as Education studies brings together topics in psychology, sociology, philosophy, special education and many other subjects. The bringing together of subjects into one area has got a lot of negative effects. Among these negative effects is that the study area becomes overcrowded and this would lead to a situation where not all sections become adequately covered. Additionally very important topics will not be taught or taught scantily as lecturers tend to rush through in order to complete the syllabuses so as to prepare student teachers for examinations. This would affect the opportunity-to-learn and has made teacher training more theoretical. Teacher training is a practical venture meaning that it should be hands on. Certain teaching skills that do not produce results in teaching should be dropped and new ones enhanced.

Second, there was no topic covered on classroom questioning at college as shown by Thompson (1997). 19.8% were the responses from primary school teachers who were involved in this study in which they revealed that they had covered no topic on classroom questioning at college. This indicates that there was no topic or training that focussed on classroom questioning skills as Thompson (1997) noted that there has been a tendency to assume that classroom questioning skills can only be picked through trial and error. During college years it is important that teacher trainees are equipped with classroom questioning skills as this could help them have where to start from as they join the full time teaching post.

Third, little time spent on training primary school teachers on classroom questioning skills as noted by Cotton (2001). 17.6% of the responses were from 23 primary school teachers who thought that little time was spent on equipping pre-service teachers with classroom questioning skills. Cotton (2001) observed that pre-service teachers are not given adequate training and preparation in developing classroom questioning skills and some primary school teachers do not receive the training at all. Primary school teachers need in-depth and broad based training and preparation in classroom questioning skills. For this to happen more time need to be devoted to the acquisition of classroom questioning skills as these skills are only second to lecture and effective in developing learners who are critical thinkers.

Fourth, little attention was given to classroom questioning skills at college as noted by Thompson (1997) that most of the books on trainee teachers in colleges only deal with classroom questioning skills brief and incidentally if not at all. This indicates that little attention is given to classroom questioning skills. Text books are an oasis of knowledge which pre-service teachers need to consult for deep understanding. Additionally Teacher Colleges of Education do not have textbooks and other learning materials that are so significant in producing teachers who are effective questioners. In primary teacher colleges of education books that are found are those which are meant for pupils written by Ministry of Education. It should be noted that classroom questioning skills are the key point in effective teaching which should be given much attention and be prioritised in teacher training colleges. Other reasons were the haphazardly choice of classroom questioning skills and lecturers at colleges giving only skeletons on classroom questioning skills.

With regard to whether primary school teachers had ever had of classroom questioning skills, it was evident from the findings that most primary school teachers 86.0% had ever heard of classroom questioning skills. However 14.0% of the respondents indicated that they have never heard of classroom questioning skills. Classroom questioning skills are important skills that every teacher should possess. They are only second to lecture method in their usage by primary school teachers in the classroom. This means that classroom questioning skills play an inseparable function in teaching, learning and testing. The effectiveness and efficiency of the primary school teacher is usually measured in regard to the classroom questioning skills that he or she employs in the class. This implies that no primary school teacher can succeed in his or her teaching if he or she has never heard of classroom questioning skills or mastered classroom questioning skills (Calvin, cited in Agarawal, 1996). However many factors could have contributed to the respondents not having heard about classroom questioning skills. Among the notable ones are that they may have not learnt about classroom questioning skills at college as there was no such topic in the syllabi or that little time prevented them from learning such topics. Additionally, at school level there is no continuous professional development meetings in which teachers could have heard or learnt of classroom questioning skills. Continuous professional development meeting are also called teacher group meetings. These are usually held by schools every week for an hour to share on professional issues such as classroom questioning skills.

With reference to where primary school teachers had heard of classroom questioning skills, the study revealed that most primary school teachers who participated in this study had heard about classroom questioning skills at school during their full time teaching job. This implies that they came out primary teacher colleges without classroom questioning skills and this has implications on the teaching especially when it comes to asking effective questioning of pupils.

Darling-Hammond (2000) revealed that teachers who have had more preparation and training for teaching are more confident and successful with pupils than those without or with little preparation and training. This finding goes on to indicate that primary colleges of education in Zambia do not raise primary school teachers who have the knowledge and skills that can bring measureable impact on pupils' learning and this have contributed to the falling standards of education at primary level. Research reveals that the standard of education can only improve when competent and skilled teachers have been trained and prepared at college (Mulkeen, 2010). Although effective questioning is a long process that need to be built slowly the basis of this

process need to be built at college. Pre-service teacher training and preparation should be looked at as the first step of a life-long undertaking process that each teacher has to pass through. College education that teachers receive makes up a concrete foundation of knowledge and the skills that they will need for the teaching in classes.

5.3 Teachers were not comfortable with their classroom questioning skills

With reference to whether primary school teachers were comfortable or not comfortable with the usage of classroom questioning skills, the study revealed that most primary school teachers (64.0%) were not comfortable with their classroom questioning skills. 32.0% primary school teachers showed that they were comfortable with their classroom questioning skills and 4% indicated that they were very comfortable with their classroom questioning skills. However, the figures for those who were very comfortable and comfortable about their classroom questioning skills were far much less than those who were not comfortable about their skills in classroom questioning. Teacher Comfortability in the use of classroom questioning skills is linked to the teacher's perception on how he/she was trained and prepared in colleges of education. Perception is closely linked to confidence and confidence determines how comfortable an individual is in using his or her skills. Primary school teachers who have no confidence and knowledge of classroom questioning skills cannot be comfortable in the usage of classroom questioning skills in class. A primary school teacher can only be comfortable in the use of classroom questioning skills if he/she has the confidence and knowledge in classroom questioning skills. Confidence and knowledge of classroom questioning can be achieved through in-depth training and preparation in classroom questioning skills at colleges.

5.4 Teachers preferred low-order to high-order classroom questioning skills

The often observed strong usage of low-order questioning system by primary school teachers was replicated in this present study. From the study it was revealed that 66.0 % of the respondents indicated that they preferred using low-order questioning to high-order questioning system. Low-order questions call the recall of factual short information, check for knowledge and understanding. This information that is needed is provided by the pupils. The findings of this study are similar to previous studies done by Burns and Myhill (2004) and Myhill et al (2006). Since the first study on classroom questioning was done by Stevens in 1912 nothing has changed in regard to the type of classroom questions that teachers ask in the class. In line with Stevens,

Gall (1970) revealed that 60.0% of the questions asked by the teacher were low-order questions and only 20.0% of the questions were high-order and another 20.0% were procedural questions. This was later confirmed by Wilen (1991) that teachers asked more of low-order questions than high-order questions. Up to date not much has changed in the type of questions those teachers ask in the classroom as indicated by Ministry of Education (2003) that teachers ask more low-order questions despite of the quantity of questions that teacher ask. Ministry of Education (2003) further state that low-order questions make up 60%-70% of the total classroom questions and that high- order questions are a rare in the class.

Tienken, et. al., (2010) examined 98 teachers in New York and New Jersey in a six year period to establish the kind of questions they asked in the class lesson time and the impact these questions had on their students. The questions were recorded, examined, and labeled as productive (those questions requiring high order thinking on the part of the students) or reproductive (those questions that needed students to only use low order thinking). The study revealed that teachers asked 2,363 questions in total. These questions were recorded and analyzed. The findings of the study were that teachers on average asked 76.0% of low-level or reproductive questions in the class. This is in line with the findings of this study. Khan and Inamullah, (2011) in their study also found out that teachers spend more than 90% of the class time questioning students, and the majority of these questions require factual information and only one correct answer.

The findings from the observation survey also revealed that all primary school teachers observed asked more low-order questions than high-order questions during their 40-minute class period. These findings give insights into the mental operations learners are involved in when answering these questions. Low-order questions are very simple in answering as they involve the recall of stored information from memory. These questions do not stimulate higher-order thinking in pupils. The findings from classroom observation conducted also revealed that three- quarters of the 40 minute lessons observed were occupied by questions. Primary school teachers in this study asked between 60 and 80 questions in a 40 minute lesson. This observation confirms the above studies and findings from the questionnaires that primary school teachers always ask questions in a class lesson.

Spending 60% -80% of class lesson time on asking low- order questions is in fact abusing and at the same time exploiting low-order than high-order questions. The misuse and overuse of low-order questions had great effect on the teacher and the learner. One of the effects is that low-order questions fail to produce learner who are independent, critical and analytical thinkers. Such learners would always depend on the teacher for information and cannot learn on their own. Modern time teaching requires the production of learners who can thinker independently, critically and analytically because of the fast paced development the world is going through. This can only be achieved if the teacher uses more of high-order questions. The following excerpt is an example of the teacher's questioning in a literacy lesson:

Teacher: what is the date today?

Pupil: silence

Teacher: Who can tell us what we learnt yesterday?

Pupil: silence

Teacher: Yes John, what did you we learn yesterday?

Pupil: Sound ' b'

Teacher: Good John, shall we look at the picture all of us?

Pupils: silence

Teacher: Ok, what can you see in the picture?

Pupils: silence

Teacher: Sileta, what can you see in the picture?

Sileta: I can see a teacher.

Teacher: Anything else, sibamba?

Sibamba: I can see father.

In another classroom observation a grade seven teacher asked part the following questions were in a mathematics lesson:

Teacher: who can guess the day today?

Pupils: silence

Teacher: Monde, can you tell us what the date is today?

Monde: its 12th July, sir.

Teacher: What is the opposite of subtraction?

Pupils: addition

Teacher: what is negative twenty plus positive five?

Pupil: positive twenty-five sir

Teacher: what?

Pupils: silence

Teacher: negative twenty-five or negative five?

Pupils: silence

Teacher: so, you cannot remember what we did?

The excerpts above seem to illustrate the type of classroom questions and cognitive requirements of the questions that the teachers used. From the excerpts it could be noticed that the questions only required low level thinking in pupils as they had to recall the facts, therefore the questions are of low-order category.

During the interview session respondents justified their use of low-order questions. One respondent said that:

...I think there is nothing you can do as a teacher unless you recall. So the questions I asked were meant for pupils to recall the information they learnt. When I use all type of questioning at once, then I shall not finish the syllabus. You know pupils need to finish the syllabus for them to pass.

In another interview with the respondent she indicated:

...I like using low-order questions because they are simple to prepare and very simple to express.

From the excerpts above the respondents seemed to indicate that they are familiar with low-order questions and they enjoy using this type of questions. From excerpt above low-order questions

are considered to be simple to prepare, answer and expression. The teachers are more comfortable in using low-order questions because of lack of exposure to other type of questioning. If primary school teachers are well trained in classroom questioning they would vary the type of questions they ask in class lesson and this is in line with Sitko and Slemon (1982) study. In their study, teachers participated for three-to- four week phases of professional development that was intended to enhance their categories and effective questioning techniques. The results of this study were that there was a significant increase in the percentage of high-level teacher questions as a result of professional development. Additionally an increase in effective classroom questioning by teachers was found in a Moyer and Milewicz (2000) descriptive case study of 48 elementary pre-service mathematics teachers. When teachers are exposed to all the types of questioning they would engage more of high-order questions than low-order questions.

In the classroom observation conducted all the respondents asked questions extemporaneously and this has effects on the quality and quantity of the questions. Some of the questions asked by teachers lacked logic; other questions had problems with language organisation and that student could not use their knowledge or skills to answer as expected.

It was also observed that the questions that were asked in classes by in-service primary school teachers were done causally without proper preparations and usage of the skills in questioning. The tendency of using classroom questioning skills causally was confirmed in Thompson (1997)'s study that classroom questioning skills are acquired through trial and error procedure. Moreover, some of the classroom questions asked by primary school teachers were irrelevant to the learning of the pupils. For example one primary school teacher teaching a lesson in Social and Development Studies (SDS) asked grade two pupils "what is maize? This question was unclear, vague and wasted the teacher and pupils' time as it had no meaning and difficult for pupils to answer. During another classroom observation of primary school teacher who was teaching a lesson in Creative and Technology (CTS) asked grade four pupils the following question "what is a brazier?" This question was vague and not useful for the pupils. In another classroom observation done in a grade five class the teacher asked pupils in a science lesson on alcohol abuse the following question; "what can happen when you are drunk?" This question is too broad and unclear as result pupils would give several answers. Such classroom questioning indicates that primary school teachers need more training in classroom questioning skills so to help them plan the questions that they would ask at each stage of the lesson in the classes.

The respondents were further asked to give reasons why they preferred low-order questions to high-order questions. Most primary school teachers indicated that they use low-order questions because of their focus on checking for knowledge, retrieval of information and their easy nature in preparation. Other reasons which were given in regard to low order questions were that low-order questions only focus on one short answer, easy to be used in assessing and measuring learners' abilities and that they were not time consuming in the preparation of low-order questions therefore the syllabus can be covered with the shortest period of time.

However, it was established that there are other factors in addition to the ones mentioned above which influence the type of questions. These factors are: intention of the teacher, the influence of the curriculum, and the training and preparation the teacher received at college. Lack of effective training and preparation of teachers at primary teacher colleges have been indicated in Sloan and Pate's study (1966) as one of the critical factors that has contributed to teacher continuous use of low-order questions. It should be noted that even when the respondents are correct in saying that they use low-order questions so as to check for knowledge, understanding and recall of information on what learners have learnt it does not mean that much of the class time should be occupied by low-order questions. One may argue that the usage of low-order questions act as foundation on which high cognition can be achieved but it should be noticed that spending a lot of time on asking low-order questions cannot prepare students who are independent, critical and analytical thinkers as required by the Zambian curriculum, (Ministry of Education, 1996).

Apart from the above mentioned implications there are still many other implications in regard to the usage of low-order classroom questioning skills by primary school teachers. Among the implications are those that are related to the national examinations. On one end the use of low-order questioning skills by the teacher is good because it prepare students examinations by completing the syllabus on time as low-order questions are not time concerning in answering and preparation but on the other end primary teachers low-order classroom questioning skills hinders the development of thinking skills in learners (Ranjit, 2004).

The examination system coupled with the overwhelming use of low-order questioning skills by primary school teachers lead to the production of learners who have the interdependency syndrome. This makes learners to fail to work individually in express their ideas and become text

book oriented. Learners see learning as taking place when the teachers are present in the classroom.

5.5 The type of classroom questioning used by teachers was related to training at colleges of education

With regard to the question on whether the type of questioning that the respondents used in class was related to the way they were trained and prepared at college, the study revealed that 60% of the respondent viewed that there was a relationship. 38.0% of the respondents felt that there was a strong relationship and 2.0% Of the respondent was not sure. From this data shown it can be said that there is a strong relationship between the teacher's use of classroom questioning skills and the pedagogical preparation and training at college. In the study of Sloan and Pate (1966) it was confirmed that the type of classroom questions that the teacher use are related to the way they are prepared and trained. Sloan and Pate (1966) compared two groups of teachers: one in the School Mathematics Study Group (SMSG) and the other in the traditional mathematics programme. They hypothesised that the two groups would differ in their questioning style. The study found that teachers in SMSG asked few recall questions and more of comprehension and analysis questions. This was also confirmed by Schwille, Dembe'le' and Schubert (2007) in their study. Schwille et al (2007) pointed out that the impact of the lecturers in teachers' colleges of education is not only seen in the knowledge teachers possess but also teachers teaches in the manner in which they were taught. It is therefore right to say that primary school teachers find delight in asking low-order questions because of the way they have trained and prepared in teachers colleges. Despite the change in the Zambian curriculum teachers are still being taught in the similar way as no change has been noticed in their use of classroom questioning skills.

In an interview with the respondents, it was established that their use of classroom questioning skills was related to the way they were trained and prepared at college. For instance one of the respondents said:

...In my classroom, pupils look up to me to provide guidance. I'm a role model in my class and pupils would copy how I talk, dress and relate. This is also similar to the college. The way our lecturers teach would be reflected in our trainees. How do expect a teacher to use learner centred methods when at college he is been taught in a tradition way, the chalk and talk procedure.

The excerpt above seems to indicate the role that college lecturers have on the acquisition of classroom questioning skills by pre-service teacher. The questioning style that college lecturers use in the class lesson has an influence on the acquisition of classroom questioning skills by pre-service primary school teacher. In the above excerpt respondent seemed to indicate that the teaching styles that college lecturers use are reflected in the way the teacher themselves teach as college lecturers are their role model to pre-service teachers.

The respondents were then asked to give reasons why they felt that the type of classroom questions they use in class are related to the way they were trained and prepared at college. Several reasons emerged in this study as a result of the analysis of the questionnaires. The respondents indicated that the way they use their classroom questioning skills tally with the way they were taught at college. In pre-service teacher training colleges lecturers usually demonstrate their skills to pre-service teacher when they are presenting their lessons. The way these college lecturers present their teaching skills has a great influence on the pre-service teachers learning process, which in turn affects their competencies (McIntyre, 1984). College lecturers are role models to student teachers meaning that student teachers imitate the way lecturers teach and this have a bearing on their teaching process during their full time teaching post. This was also confirmed by the study of Schwille et al (2007).

The second most frequent reason was that no topic was covered on classroom questioning skills in primary teachers colleges of education. The present Primary teacher curriculum has advocated for the grouping of separate subjects in study areas. For example psychology and sociology have been grouped in Education study area. There are many implications to this combination of subjects into study areas. One of the implications is that most of the topics have been removed from the contributing subjects so as to have the content that can be taught in the short period of time. Second is that if no topics have been removed then the syllabuses have been overloaded with much content from the contributing subjects. Both the removal of some topics and overcrowdness of the syllabuses would have contributed to the respondents indicating that no topic was covered on classroom questioning skills. This could be that college lecturers rushed through the topics using lecturing skills so that they could complete the bulky syllabuses on time and prepare the student teachers for national examinations. This therefore means that such topics

as classroom questioning would be skipped because of the conviction that these skills can be acquired through try and error procedure as indicated by Thompson (1997).

Lecturers' teaching styles acts as a model to student teachers was the fourth reason given by the respondents. In primary teachers colleges of education lecturers are the role models to student teachers. Student teachers are usually attracted to the teaching skills, thinking and philosophies of their lecturers. Lecturers in primary teachers colleges are in an ideal position of providing models of appropriate classroom questioning skills by demonstrating good practice in their own teaching (Mulkeen, 2010). The teaching skills, philosophy and their classroom questioning skills of college lecturers become reflected in the student teachers. If a college lecturer is always using low-order classroom questioning skills these will be reflected in their student teachers. The classroom questioning system that student teachers will be using during the full time teaching will reflect the way their lecturers used classroom questioning skills. It is important that college lecturers practice what is stipulated in the curriculum as this would be transmitted to learners through the teacher. Both the curricular at primary school level and college level emphasise active participation of the learners in the learning process. The active participation of learners in the learning process can only be achieved when college lecturer effectively use classroom questioning skills. If teachers undergo this type of learning it will be easier for them to involve learners in the learning process through effective use of classroom questioning skills.

5.6 Primary teachers colleges of education are not doing enough in training teachers in classroom questioning skills

In this study most (78.0%) of the respondents indicated a "no" on whether primary teachers colleges of education were doing enough in preparing and training teachers in classroom questioning skills. It was revealed that these primary school teachers perceived their initial training and preparation in primary teachers colleges of education as not been adequate. This was also noted by cotton (2001) when she stated that pre-service teacher education are not giving adequate training and preparation to teachers in classroom questioning skills and that some do not receive the training at all. Good and Brophy (2000) and Gruenewald and Pollack (1990) reported in their studies that primary school teachers are unaware of their classroom questioning skills and they are unable to examine or adjust their classroom questioning skills because they are not trained in classroom questioning skills. In other words most primary school teachers do

not know how to formulate a good question, nor do they know how to use question properly. This means that primary school teachers have to use classroom questioning skills in a haphazard manner. This is likely to affect the quantity, type and quality of questions that the teacher would ask in the class lesson.

In the interview the respondents reported that primary teachers colleges of education were not doing enough in preparing and training of primary school teachers in classroom questioning skills. One of the respondent, for instance pointed out:

...Our primary teachers colleges of education are doing literally nothing. The teachers that come out of these colleges are half-baked and cannot Perform. Especially the so called ZATEC teachers they are the worst. They are failing to implement teaching; just making a lesson plan is difficult, you see.

Another teacher interviewed said:

...Primary school teacher in our primary teacher colleges are not trained and prepared and those trained and prepared in classroom questioning than they are not well trained and prepared. Primary teacher education is now confused. The important courses for professional training are treated in a very shallow way. The graduates have no content and skills. Colleges are not doing enough.

One teacher interviewed also said:

...Most teacher education curricula taught in our nation's colleges are loaded with too much abstract theory and too little realistic practical help.

The excerpts above show that the respondents were not happy with the graduates that were coming from the primary teachers colleges of education. The respondent in the first excerpt seem to further pin point that graduate teachers from the ZATEC programme are ill-trained and

prepared in colleges that is the reason they are failing to teach. The respondent from the second excerpt pointed out the courses at primary teachers colleges of education were been in a very shallow manner. Primary school teacher came out of these colleges with little or no skills in classroom questioning.

The training and preparing of primary school teachers in classroom questioning skills is the sole responsibility of the teacher training colleges and universities. The most significant goal of teacher training colleges must be to equip and improve the skills and knowledge of the pre-service teachers so that they can be effective teachers in the field. Teacher training colleges need to provide teachers with not only some basic skills and knowledge but also deeper conceptual understanding of classroom questioning skills.

According to Porter (1975) the 31st international conference on teachers which was held in Geneva observed that teacher training colleges in most countries in Africa do not produce teachers who have the skills and knowledge to be effective teachers. Despite many attempts made on teacher training and preparation little change has been observed as teachers are still being trained and prepared in the same way. This is the reason why primary school teachers have become a central issue of public concern in recent years. Primary school teachers have failed to produce learners who are independent, critical and analytical thinkers as required by modern societies. This has negative impact on the development of the nation as Boaduo (1988) and Lawal (2006) noted that no nation can develop beyond the quality of its educational system which is greatly influenced by the quality of its teachers.

Among the reasons established in this study why primary teachers colleges of education were not training primary school teachers adequately in classroom questioning skills was the haphazard changes that occur in primary teacher education. Kalimaposo (2010) noted that curriculum changes in primary teachers' education appeared haphazard and this ad hoc change had effects on the training and preparation of teachers. Among the effects as noted by Kalimaposo is that college lecturers are demotivated as they do not have enough time to familiarise and adapt themselves with these ever-changing curricular and consequently primary school teachers are not adequately trained and prepared. The curriculum is a guide on the content to teach and how it should be taught. The demotivation of college lecturers is seen in the quality of the primary school teachers they are able to produce. Sloan and Pate (1966) noted that

teacher's use of classroom questioning skills is much dependent on the type of curriculum and its material present. In summary primary teacher training is not planned properly (Ministry of Foreign Affairs, 2008).

The second most frequent reason given was that syllabuses at teacher training colleges were overcrowded. The Zambia Teachers Education Course (ZATEC) has grouped the traditional single subjects into study areas. These study areas bring together related subjects into one area. For example the Education study area is made up of psychology and sociology aspects, special education needs, philosophy of education and educational management (Ministry of Education, 2001). This makes the syllabi to be overcrowded and not all sections of each contributing discipline will be adequately covered. This means that there will be some omissions and inadequacies in covering the syllabuses. College lecturers are therefore required to complete these overcrowded syllabuses so as to prepare the students for the external examination. This would make college lecturers use lecture skills with few low-order classroom questioning skills. Lectures at teacher education level have become increasingly one-sided and teacher-centred. This limits the communication between the lecturer and student and opportunities for the development of classroom questioning become severely affected. Lecturers at primary teachers training college would justify that lecturing skills ensure an excellent coverage of the syllabuses in line with the limited time available for completion of syllabuses before examination. The tendency of overcrowding knowledge and skills may also lead to some topics not being covered extensively or avoided at all. It should be noted that the Zambia Teacher Education Course (ZATEC) was a fast track teacher training programme whose aim was to increase the number of teachers in primary schools; therefore it more focussed on quantity and not quality.

The third most frequent reason given was that lecturers in primary colleges are not fully trained in classroom questioning skills. Most lecturers in primary teacher training colleges had not received specialist training in teacher development as observed by Mulkeen (2010). The lack of training in classroom questioning skills by lecturers affects the consistency in the teaching of classroom questioning skills. Avalos (2000) adds that poorly trained lecturers are likely to teach the way they themselves were taught, and are slow to incorporate new teaching skills into their teaching. This reason has been noted also by Kunje and Lewin (1999) who concluded that the majority of teachers in primary teachers training colleges were either secondary school teachers or primary school teachers who have been transferred to the college to train primary school

teachers without any further training themselves. These teachers join the primary teachers colleges without thorough understanding the basics of classroom questioning skills and pedagogical content. This is the situation that prevails even in the Zambian primary education system as noted by Mulkeen (2010). It is important to appoint teachers who are teaching at primary school sector to be lecturers at primary teachers colleges as these can draw from their own experiences. Lecturers at primary teachers college need to be trained on classroom questioning than letting them to do trial and error method. The teaching processes used by college lecturers influences the learning process of the student teachers which in turn affects the pre-service teachers' classroom questioning skills. In short the quality of teacher training is dependent on the quality of college lecturers.

The fourth reason given was that lecturers in private teachers colleges are not fully qualified in teaching at colleges. The establishment and running of private institutions has been noticed as a growing mode of community participation in education (Ministry of Education, 1996). Most private colleges in Zambia have been established for business and these charge market value fees. Moreover, private colleges of education do not receive grants as compared to public colleges and this situation does not attract well qualified lecturing staff. Due to their business orientation most private teachers colleges do not require their lecturers to have the minimum educational qualifications to teach in a college of education. The implication is that pre-service primary school teachers who come out of these colleges are not fully trained and prepared for a teaching job. Primary school teachers who brought out this reason may have been the victims of such situation.

The fifth reason given was the short period time which is devoted to the training and preparation of teachers in primary teachers' colleges. In Zambia the pre-service education for primary school teachers usually last for two years. The first year is college based which emphasise on theoretical knowledge and the second year is field based which involves practicals in real teaching. Before these changes occurred in primary teachers' curriculum, pre-service teachers used to take two years of college based learning. The reduction of college based learning from two years to one year is on one perspective good in that it is the fastest way of covering up the shortage of teachers within a short period of time. But from the another perspective which is important is that the reduction of college based years from two years to one year affect the training and preparation of the much needed qualitable and effective primary school teachers. In the long

term, the quality of education becomes poor as it fails to bring learners who can fit in an ever-changing world. Currently, the primary pre-service course has been shifted to two years in college and the second term for teaching practice. The period for teaching practice is too short and has no connection with the coursework. The structure of teaching practice does not allow student teachers to do various tasks needed by the teacher. During teaching practice student teachers are expected to follow the classroom norms and practices that are already set by the class teachers. This means that student teachers are faced with an existing culture that simply dictates to them what should be done. Student teachers would therefore spend a lot of time trying to adjust into the existing culture rather than trying their newly acquired skills and by the time they settle down the period for teaching practice is over. Additionally these changes have not gone along with the changes in the syllabuses. The change in the programme should go alongside with changes in the syllabuses. With this in mind the content for training a teacher to teach in a primary school and the period to which this content should be taught do not much. The period of training a competent primary school teacher in Zambia is too short.

It is important to note that students who are admitted in primary teachers colleges have just completed their secondary education and are still in the adolescent stage. Such students have no prior experience in primary school teaching. Hence giving training to such students for two years at college is inadequate as they need first of all to acclimatise to college setting. This situation offers primary school teachers with no or little opportunities for acquiring minimal skills and knowledge in classroom questioning skills. Moreover, of these admitted students into primary teacher training colleges have generally poor performance in writing, spelling and spoken languages which are critical skills in classroom questioning. Since colleges admit students who come direct from secondary schools it is significant to increase the time of training and preparation for primary school teachers. Teachers who have many years of training in college have a higher retention rate and teaching skills when compared to teachers with a year of training in college.

5.7 Summary

This chapter has discussed some key findings on perceptions that serving primary school teachers have on their training and preparations in classroom questioning skills in primary teachers colleges of education. The discussion focused on the how the respondents perceived the

training in classroom questioning skills in primary teachers colleges of education, the type of classroom questions that respondents preferred using in daily class lesson practices and the relationship between the type of classroom question that respondents used and their training at colleges.

The findings from the questionnaires also revealed that most in-service primary schools teachers had heard of classroom questioning skills at school during the full time teaching job. Furthermore, it was established that most in-service primary school teachers rarely used high-order classroom questions. The findings from questionnaires also revealed that most in-service primary school teachers perceived their training in classroom questioning skills in primary teachers colleges of education as not been adequate. And that the type of classroom questions they used in their class lessons was related to the way they were taught at school. The findings from the classroom observation also established that most in-service primary school teachers use a lot of low-order questions than high-order questions. Additionally the cognitive operation of children was at the low level because of the usage of low-order questions. It was also discovered that the respondents did not prepare the questions to ask in class lesson in advance. Different factors that could have prevented adequate training of teachers in classroom questioning skills and their persistent use of low-order questions are also discussed in this chapter.

Social cognitive theory of Bandura (1997) and Allport's theory (1966) formed the theoretical framework of this study. Bandura (1997) looks at people as being both the products and producers of their environment. The social cognitive theory looks at individual's thoughts and feelings as having a key part in the way an individual view the world. Human beings through their self-reflective thought are capable of evaluating their capabilities, surrounding environment, behaviour and future performances. Allport (1966) discusses the psychological concept of perception as a way we evaluate what we are familiar with. In Allport's view of perception the perceiver is the "judge". In this study in-service primary school teachers served as judges making judgement on their training and preparation in classroom questioning skills in primary teachers colleges of education. The theory for Allport was found suitable for the study as a theoretical framework because of the process that is involved in person perception. In-service primary school teachers are familiar with the education that is taking place in teacher colleges of education because they have passed through it and have got the experience or knowledge thus they are capable of making judgement on their training in classroom questioning skills. The

perceptions that teachers hold about their training in classroom questioning has a great influence on the variety of teaching skills, styles and model, thus influencing teaching and learning processes.

CHAPTER SIX:

CONCLUSION AND RECOMMENDATION

6.1 Overview

Chapter six presents the conclusion and recommendations drawn from the findings of the study. The study was conducted to investigate teacher perceptions of their training and preparation in classroom questioning skills in primary teachers colleges of education with a focus on primary school teachers in Lukulu district of Western province. The main aim of this study, therefore, was to fill the knowledge gap by finding out the perceptions that primary school teachers had on their training and preparation in classroom questioning skills in primary teachers colleges of education.

6.2 Summaries

Teacher classroom questioning skills are considered to be one of the most important teaching skills. Classroom questioning skills act as a key for opening the minds of the students, which otherwise would remain locked (Khan, 2012). McKenzie (2003) showed the importance of classroom questioning by indicating that once an individual has learnt how to ask appropriate and relevant questions, he has learned how to learn and no one can stop him/her from learning what he want or need to learn. This significant feature of classroom questioning skills has not being recognised in the Zambian educational system as has being in the current study.

The purpose of the study was to provide research findings on the perceptions that serving primary school teachers had on their training and preparation in classroom questioning skills in primary teachers colleges of education. It is hoped that teacher educators, primary school teachers, policy makers and curriculum developers would find the information useful. The study has contributed to the existing body of knowledge on classroom questioning skills in primary teacher education in Zambia.

A descriptive survey design was used in this study. Both qualitative and quantitative methods were used in this study for the collection of detailed information about perceptions that serving primary school teachers have on their training and preparation in classroom questioning skills in

primary teachers colleges of education. The research used questionnaires and classroom observation schedules.

In this study the systematic random sampling procedure was used to select the sample. The study was made up of 100 serving primary school teachers in Lukulu district of western province and descriptive statistics were used in this study. The Statistical Package for Social Sciences (SPSS) was used to analyse quantitative data while qualitative data was grouped into themes. Frequency distribution and percentages were presented in form of tables and graphs.

The study revealed that perceptions that primary school teachers have on their training and preparation in classroom questioning skills in primary teachers colleges of education has a great influence on their usage of classroom questioning skills in their classes. It was important to study primary school teachers' perception because it brought out the underlying feelings and attitudes about their training and preparation in classroom questioning skills. In this study primary school teachers revealed their training and preparation in classroom questioning skills as not being adequate. When primary school teachers are not adequately trained and prepared in classroom questioning skills, it is usually difficult for them to prepare appropriate, relevant and effective questions. This means that asking appropriate and relevant questions is a skill that needs expertism. Due to the fact that primary school teachers are not given adequate training in classroom questioning skills at colleges of education, they tend to assume that these skills can only be picked-up through trial and error (Thompson, 1997).

The findings from this study also revealed that primary school teachers preferred using low-order classroom questions to high-order classroom questions. Different reasons were given to support their preference. Among the reasons were that low-order questions were easier to prepare and that overcrowded syllabi and examinations determined the pace of teaching as teachers were supposed to finish the syllabi and prepare students for examinations. The continuous usage of low-order classroom questioning skills by primary school teachers has great implications on the learners and the quality of education provided. Learners may view learning as the memorisation of facts that will need to be off-loaded at one time thus leading to rote learning.

It was discovered through this research that primary school teachers' classroom questioning in classes was related to the way they have been trained in primary teachers' colleges of education. Most teaching in primary teachers colleges of education still reflect the traditional way of

instruction with the teacher being the sole provider of instructions and the pre-service teachers passively grasping the content from the lecturer. This has been an ideal situation for the usage of lecture skills that are accompanied by low-order classroom questions. College lecturers act as role models to pre-service teachers in the way they present their lessons. The way college lecturers give conceptual and theoretical information to their students is critical as this would be reflected by the student teachers. It is therefore important for college lecturers are conscious of the way they present their lessons in their classes.

6.3 Recommendations

Based on the study, the following recommendations emerged:

- (i) There is need for participatory teacher training programmes because in this training model, teachers take an active role in the training process. Training of teachers moves away from being theoretical to being practical.
- (ii) Pre and post service teacher training programmes should focus on training primary school teachers in classroom questioning skills.
- (iii) Teacher Group Meetings (TGMs) should be utilised to improve teacher skills in classroom questioning skills.
- (iv) There should be capacity building for primary school teachers through workshops and seminars so as to improve classroom questioning skills should be the major focus if teaching and learning is to be meaningful. These should be done more especially during school holidays.

6.4 Suggestions for further research

- (i) A similar study on teachers' perceptions of their training and preparation in classroom questioning skills in secondary teachers training colleges should be conducted.

- (ii) A comparative study on classroom questioning skills between primary teachers in urban and rural areas can be done. This would give insights into whether school location can influence how and the type of classroom questions the teacher use.
- (iii) A study should be conducted on the classroom questioning skills of college lecturers in primary teachers colleges of education. This will give insights in the classroom questioning Skills College lecturers have and the influence they have on pre-service teachers' classroom questioning skills.
- (iv) A study to find out whether teachers (male or female) tended to ask male learners more high-order questions than they do to female learners. This would bring out how teachers perceive the cognitive abilities of male and female learners.

REFERENCES

- Aikenhead, G.S. (1997). A framework for reflecting on assessment and evaluation. *Headlinear Symposium 4. Assessment Strategies*.
- Allport, G.W. (1966). Pattern and growth in personality. London: William Clowes and Sons, Ltd. *American School Board Journal*, (188) 43-45.
- Arends, R.I (1997). *Classroom Instruction and Management*. New York: The McGraw –Hill Companies. Inc.
- Ashton, P.T. (1990). Editorial. *Journal of Teachers Education*, 41(1) 1.
- Avalos, B. (2000). “Policies for teacher education in developing countries.” *International Journal of Educational Research*: 33, 457-74.
- Azerefegn, K. (2008). *A study on the types of teachers’ questions and questioning strategies: The case study of two private secondary schools in Addis Ababa*. Unpublished master dissertation. Addis Ababa University- Institute of Language studies.
- Banbrook, L., & Skehan, P. (1989). “ Classroom and Display Questions.” In Brumfit, C. & R. Mitchell (Eds.), *ELT Documents: 133 Research In The Language Classroom Guiding Questions*. Unpublished manuscript. Pp. 141-152
- Bandura, A. (1997). *Self-Efficacy: The exercise of control*. New York: Freeman.
- Barcelos, A. M. F. (1999). *The interaction between students’ beliefs and teacher’s and dilemmas*. Paper Presented At The International language teachers education conference research and practice in language teacher education: Voice from the field, Minneapolis, MIN.
- Behnam, B. (2009). Classroom discourse: Analysing teacher/learner interaction in Iranian EFL task based classroom, *porta Lingurum* 12.
- Bell, J. (2005) *Doing your research project* (4th Ed.) Buckingham: Open University Press.
- Best, J.W., & Kahn, J. V. (1998). *Research in education* (8th Ed.) London: Allyn and Bacon.

- Best, J. W. (1970). *Research in education*. New Jersey: Prentice-Hall, Eaglewood Cliff
- Biseat, D. (1987) *Teaching material for 1st cycle primary teachers training program*.Awassa: SNNPR Education Bureau.
- Black, S. (2001). Ask me a question: How teachers use inquiry in the classroom. *American School Board*.188(5), 43-45.
- Black, K. (2010). *Business statistics: contemporary decision making*.John Wiley and Sons.London.
- Bloom, B., Englaehart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D.R. (1956).*A Taxonomy of educational objectives, handbook 1: The cognitive domain*. New York: David McKay.
- Boaduo, N.A.P. (1988). *The state-church conflict in management of education in the kingdom of Lesotho*.Unpublished thesis for licentiate of the college preceptors' qualification LCP. Theydon Bois, Eppin: Sussex: United Kingdom.
- Brock, C.A. (1986). The effect of referential questions on EFL classroom discourse.*TESOL quarterly*, 20(1), 47-59.
- Brookhart, B.A., & Freeman, D.J (1992).Characteristics of entering teacher candidates.*Review of education research*, 62 (1), 37-60.
- Brown, G.A., & Edmonds, R. (1989).Asking questions.In *classroom teaching skills*, Ed E.C Wragg, 97-120. New York: Nichols.
- Brown, H.D., (1994). *Teaching by principles: An interactive approach to Language pedagogy*. Prentice-Hall: Regents.
- Brualdi, A. C. (1998). Classroom questions: Practice assessment research and evaluation. *TESOL*, 2(2), 12-24.
- Burden, P.R., & Byrd, D.M. (1994).*Methods for effective teaching*. Boston: Allyn And Bacon.
- Burns.C, & Myhill, D. (2004). Interactive or in-active:*Cambridge journal of education*, 34(1), 35-49.

- Charles, W.S. (1991). Questioning in classroom: A Sociolinguistic.*Review of education research*. 61(2), 157-178.
- Chuan-Bao, J. (1997). Reviews of teachers questioning techniques in America. *Elementary and secondary schooling abroad*3, 5-8
- Clark, C.M. (1988). Asking the right question about teacher' preparation: contributions to research on teaching thinking. *Educational Researcher*, 17 (2), 5-12.
- Clark, C.M., & Peterson, P.L. (1986). Teacher' thought processes. In M.C. Wittrock (Ed).*Handbook of teaching*. (Pp. 255-296). New York: Mac Millan.
- Cohen, L. & Manion, L. (1994). *Teaching Principles And Practice*, 2nded. Prentice Hall, Sydney.
- Cooper, J. M. (Ed). (1990). *Classroom skills* (4th Ed). Toronto: D.C. Heath And Company
- Cotton, K. 1988). Classroom questioning school improvement research series (SIRS).series Portland, Or, Northwest Regional Educational Laboratory. Education.*Eric Online*. 1995.
- Cotton, K. (2001) Classroom questioning: school improvement research: series Portland, Or, Northwest Regional Educational Laboratory.*Education.Eric Online*. 1995.
- Cross, D.I. (2009). Alignment, cohesion, and change: Examining mathematics teacher' belief structure and their influence on instructional practices.*Journal of mathematics teacher education*,12 (5), 325-346.
- Croom, B.,& Stair, K. (2005). Getting from Q To A: Effective questioning for effective learning.*The agricultural education magazine*, (78), 12-14
- Cruickshank, D. (2009). *The act of teaching* (5th Ed). New York: McGraw-Hill
- Cruickshank,D., & Metcalf, K. (1990) Training within teacher preparation. In Houston,R. (Ed) *Handbookof research on teacher education*. New York: Macmillan
- Crunkilton, J.R (1990). Thinking aloud about this process we call teaching. *Journal of the American association of teacher educators in agriculture*, 29(1), 2-10.

- Danielson, C. (1996). *Enhancing professional practice; A framework for teaching*. Alexandria Va; Association For Supervision And Curriculum Development.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education policy analysis archives*, 8.
- Davis, S., & Davis, B. (1998). *Effective training strategies*. San Francisco: Barrett-Koehler Publishers.
- Dawson, M.R.W. (1998). *Understanding cognitive science*, Oxford: Blackwell.
- Dhunpath, R. (2000). Life history methodology: “Narradign” regained. *International journal of qualitative studies in education (QSE)*, 135 (5), 1-9.
- Dillon, J.T. (1988). *Questioning and teaching: A manual of practice*. New York: Teachers College Press.
- Dillon, J. T. “Do your questions prevent thinking?” In Hamilton, H.K. (Ed).1987 *Teacher’s strategies*. Springhouse: Springhouse Corporation.
- Dumteeb, N. (2009). Teachers’ questioning techniques and students critical thinking skills: English language classroom in the Thai context. *Proquest dissertation and thesis*.
- Edwards, S.,& Bowman, M.A. (1996).Promoting student learning through questioning: A study of classroom questions.*Journal on excellence in college teaching*7(2), 3-24
- Ellis,K. (1993). *Teacher questioning and behavior and student learning. What research say to teacher*.(Paper presented at the 1993 convection of thewestern states communication association. Albuquerque, New and Mexico) (Ed 359572).
- Ellis, R. (1999). *The study of second language question*. Shanghai foreign language education press Shanghai. China.
- Eraut, M. (1994). Teacher education designed or framed. *International journal of education research*, 33 (5), 557-574.

- Frazalur, R. Nabi, B.X., Yasmin, A., & Ajmal, J. (2011). Relationship between training of teachers and effectiveness teaching. Center For Promoting Ideas, USA. (2)4.
- Frazeer, B., & Rudnitski, R.A (1995). *Integrated teaching methods*. Albany: Delmar Publisher.
- Gall, M. (1984). Synthesis of research on teachers' questioning. *Educational leadership*, 42, 40-47.
- Gallagher, J.J., & Aschner, M.J. (1963). A preliminary report on analysis of classroom interaction. *Merrill-Palmer Quarterly*, 9, 183-194.
- Gephart, R. (1999). Paradigms and research methods. Retrieved July 12, 2012, From [Http://Www.Aom.Pace.Edu./Rmd.html](http://www.aom.pace.edu/rmd.html)
- Glover, J., & Bruning, R. (1990). *Cognitive psychology for teachers*. New York: Macmillan.
- Golkar, M. (2003). Classroom observation: Interaction time and question and answer patterns *Indian Journal of applied linguistics*, 29, 79-89.
- Good, T. L., & Brophy, J.E. (2003). *Looking in classrooms* (9th Ed). Boston: Pearson.
- Gruenewald, L.J., & Pollak, S.A. (1990). *Language interaction in curriculum and instruction* (2nd Ed). Austin: Pro-Ed, Inc.
- Guilford, J.P. (1956). The structure of intellect. *Psychological bulletin*, 53, 267-293.
- Haliza, J., & Ling, T.K. (2008). *A study on TESL trainees' perceptions towards classroom delivery skills*. Fakulti Of Pendidikan. Universiti Teknologi Malaysia.
- Ho, D.G.E. (2005). Why do teachers ask the questions they ask? *RELC Journal*, 36(3), 297-310.
- Holec, H. (1987). The learner as manager: managing or learning or managing to learn? In A. Wenden & J. Rubin. Z. (Eds.). *Learner strategies in language learning* (Pp. 145-156). London. Prentice Hall.
- Houston, V.M. (1938). Improving the quality of classroom questions and questioning. *Educational administration and supervision*. Vol. 24.

- Howard, R.G. (1970). *The pre-service development of teacher skill in reading questioning strategy*. Unpublished Doctorial Dissertation, Ball State University, Munich, In.
- Howsam, R.B., Corrigan, D.C., Denmark, G.W., & Nash, R.J. (1976). *Educating a profession. Report of the bicentennial commission on education for the profession of teaching of the American association of colleges for teacher education* Washington, D.C
- Hsu, W.H. (2001). *How classroom questioning influence second language acquisition*. PhD Dissertation. University of Illinois at Urbana-Champaign.
- Huang, S.C. (1997). Taiwanese senior high school student' EFL learning: Focus on learning strategies and learning beliefs. *Dissertation abstracts international*, 58(03), 780 A. (UNI No. 9727936).
- Hussin, H. (2006). Dimension of questioning: A qualitative study of current classroom practice in Malaysia. *TESL-EJ*. 10, 2
- Hyman, R. T. (1979). *Strategic questioning*. Englewood Cliffs, NJ: Prentice-Hall
- Ijaiya, N.Y.S. (2008). The quality of teacher education in Nigeria. In A. Ejiogu & V. Onyene: *Emergent issues in Nigerian Education*. 4. September, 2008. Pp. 230-250.
- Imogene, R. & Carol G. (1990). Questioning : An effective teaching method. *Clearing House*, 000986855, 63 (9). Database: Academic Search Complete.
- Isyaku, D. (2002). Teacher education in the 21st Century. In C.M. Anikweze, M.O. Ojo, and A.A Maiyanga (Eds) *Teacher education in Nigeria*. Abuja: National Commission for colleges of education (NCCE)
- Jacobsen, D. A. et al. (1999). *Methods for teaching: Promoting student learning*. New Jersey: Prentice Hall, Inc.
- Jensen, R. A., & Kelly, T. J. (2000). *Teaching, leading and learning: Becoming caring professionals*. Boston/New York: Houghton Nifflin Company.

- Kalimaposo, K.K. (2010). *The impact of curriculum innovation on primary teachers' education in Zambia*. Unpublished Doctoral Thesis, Lusaka. The University of Zambia.
- Kauchak, D., & Eggen.P. (2001).*Educational psychology: Windows on classrooms*. New Jersey:Prentice Hall, Inc.
- Kauchak, D., & Eggen. P. (2002).*Strategies for teachers: Teaching content and thinking skills*(4th Ed.). Needham Heights: M.A Allyn and Bacon.
- Kawanaka, T., & Stigler, J. W. (1999). Teachers' use of questions by eight-grade mathematics classrooms in Germany, Japan, and the United States, *Mathematical thinking & learning*, 1 40-255.
- Kegan, D. M. (1992).Implication of research on teachers' belief.*Educational psychologist*, 27 (1) 60-90.
- Khan.M. (2010). Helping primary school teachers in mountainous valley of chitralPakistan to enhance students' learning through questioning. *International Journal of academic research in business and Social sciences*. 2(30), 17-26. <Http://Ecommons.Aku.Edu/Pakistan IedPdcc/5>.
- Khan, W., & Inamullah, H. (2011).A study of lower-order questions at secondary level.*Asian Social Science*, 7(9), 149-157. Doi:5539/Ass.V7n9p149.
- Kim, E. C.,& Kellough, R.D., (1978).*A resource guide for secondary school teaching*. New York: Macmillan Publishing Co Inc.
- Klein, M. L., Peterson, S.,& Simington, L. (1991).*Teaching reading in the elementary grades*.Massachusetts: Allyn and Bacon.
- Krause, S.K. (1997). *An account of second language teaching and learning ion a multi-standard farm school classroom: Utilising an Ethnographic approach*. Unpublished Maser Thesis, Grahams Town: Rhodes University.
- Kunje, D., & Lewin, J. (1999).Supporting untrained teachers in Malawi.*International journal of educational development*, 19, 157-166.

- Kyriacou, C. (1998). *Essential teaching skills*, (2nd Ed). Stanley Thomas Ltd, UK.
- Kyriacou, C. (2001). *Essential teaching skills*, Herts: Simon & Schuster Education.
- Lave, J. (1995). Situated learning in communities of practice. In F. Laevers (Ed). *An exploration of involvement as an indicator for quality in early childhood education*. Dundee, Scotland: Scottish consultative council on the curriculum.
- Lee, Y.A. (2008). Yes-No questions in the third-two position: pedagogical discourse processes. *Discourse processes*, 45(3), 237-263.
- Leedy, P.D., & Ormrod, J.E. (2005). *Practical research: Planning and Design*. Upper Saddle River New Jersey: Pearson Education Inc.
- Lemlech, J.K. (1988). *Classroom management: Method and techniques for elementary and secondary teachers* (2nd Ed). New York/ London: Longman.
- Macdonald, R. E. (1999). *A handbook of skills and strategies for beginning teachers: Facing the challenge of teaching in today's schools*. New York/ London: Longman.
- Macintyre, C. (2000). *The art action research in the classroom*. David Fulton. London.
- Matthiessen, E. L. (2006). *Teacher questioning: Effect on student communication in middle school algebra mathematics classrooms*. Unpublished master degree thesis. Texas A& M University.
- McCormick, M.J. (2001). *Self- efficacy and leadership studies*, 8 (1) 22-33.
- McMillan, J.H. & Schumacher, S. (1993). *Research in education: A conceptual introduction* (3rd Ed). New York: Harper Collins.
- Meighan, R. (1986). *A Sociology of Educating* (2nd Ed). London: Holt Rineheart and Winston Ltd.
- Ministry Of Education, (2010). *Educational statistical bulletin*. Lusaka: Government Printers.
- Ministry of Education, (1996). *Educating Our Future: National Policy on Education*. Lusaka: Government Printers.

- Ministry of Education.(2001). *Teacher Curriculum Manual*. Lusaka: Government Printers.
- Ministry of Education, (2009).*School-based continuing professional development through lesson study: Teaching skills book*.CDC.Lusaka.
- Ministry of Education. (2002). Lusaka: *statistical bulletin*: Government Printers
- Moyer, P.S. & Milewicz, E. (2002).Learning to question: categories of questioning used by pre-service teachers during diagnostic mathematics interview, *Journal of Mathematics Teacher Education*, 5,293-315.
- Mulkeen,A. (2010). Learning to question: Categories of questioning used by pre-service teacher during diagnostic mathematics interviews.*Journal of Mathematics Teacher Education*, 3, 293-315.
- Myhill, D.,& Dunkin, F. (2002). What is a good question? Literacy, 33, 8-9. National council of teachers of mathematics.(2000). *Principles and standards for school mathematics*. Reston, Av: Author.
- Myhill,D., Jones,S. & Hopper, R. (2006).*Talking, listening and learning: Effective talk in the primary classroom*. Maidenhead, U.K: Open University Press.
- Nenty, H.J., Adedoyin, O.O.,&Major, T.E. (2007).*Analysis of the perception of classroom assessment practice as means of providing quality education by teachers and teachers' trainees in Botswana schools*.A Paper Presented at the 11th Biennial Botswana International Symposium at University of Namibia. Windhoek.
- Netherland Ministry of Foreign Affairs, (2008). *Primary Education in Zambia*. The Hague: OBT
- Neuman, L. (2006). *Social research methods: Qualitative and quantities approaches* (6th Ed). London: Pearson International.
- Newman, F.M. (1988). A test of higher-order thinking in social studies perspective writing on constitutional issue usingNAEP approach.*Social education*, 54(4), 369-373.

- Nhlapo, M. (1998). *A case study of a teacher's questions in an English in second language (ESL) classroom*. Unpublished Master Dissertation. Rhodes University.
- Nisa, S., & Khan, A. (2012). Questioning practice in social studies classroom. A Case study from Pakistan. *International Journal Social Science and Education*. V.2, 3.
- Noel, F.M., & Ernesto, S.F. (2010). *A proposal to improve teacher in poor countries*. Paper presented at the meeting of the comparative and international Education society. March 1- 5 2010, Chicago.
- Nunan, D., & Lamb, C (1996). *The self-directed teacher: Managing the leaning process*. Cambridge: Cambridge University press.
- Nystrand, M., & Gamoran A. (1990). *Student engagement: when recitation becomes conversation*. Madison, WI: The University of Wisconsin- Madison, Center on Effective Secondary schools.
- O' Neil, R. (1991). The plausible myth of learner- centeredness or the importance of doing ordinary things well. *ELT Journal*, (45) 4, 293- 304.
- Ogunniyi, M.B. (1990). *Educational measurement and Evaluation*. Longman. Abuja.
- Omobola, A. (2010). An investigation of the effects of teachers' classroom questions on the achievements of students in mathematics: A case study of Botswana community junior secondary schools. *European Journal of Educational Studies* 2 (3), 277-292.
- Orlich, D. c., Harder, R.J., Callahan, R.C. Kauchak, D.P., & Gibson, H.W. (1994). *Teaching strategies: A guide to better instruction (4th ed)* Lexington, MA: D.C. Heath and company.
- Ornstein, A.C. (1995). *Strategies for Effective Teaching (2nd Ed.)*. Dubuque, IA: Brown & Benchmark.
- Pate, R.T., & Bremer. N.H. (1996). Guided Learning through skilful question. *Elementary school Journal*, 67, 417 -422.

- Patton, M. (1986). *Utilization- focused evaluation*. Beverly Hills: SAGE.
- Patton M.Q. (1989). *How use qualitative method in evaluation*. (3rd ed): USA. Sage publication.
- Perry, M., Vanderstoep, S., & Yu, S. (1993). Asking questions in first –grade mathematics classes: potential influences on mathematics thought. *Journal of Educational Psychology*, 85(1), 31-40.
- Phiri, J.T. (2009). *A Perspective of the Challenges Facing (Basic School) Teacher Training, Recruitment and Quality in Zambia*. The University of Zambia. Zambia.
- Ping, S. & Butsakorn, Y. (2011). Teacher’s Questioning and students’ Critical thinking in college EFL Reading Classroom. *Paper presented at The 8th International postgraduate Research colloquium: Interdisciplinary approach for Enhancing Quality of life IPRC Proceedings*.
- Psencik, L.F. (1971). *Some relationship between attitude, verb behaviour and cognitive level of classroom questions of secondary America history teacher*. Doctoral dissertation, Texas A&M University.
- Puchta, H. (1999). Beyond materials, techniques and linguistic analyses: The role of motivation beliefs and identity. *Plenary session at the LATEFL: 33RD International Annual Conference, Edinburgh, 64 – 72*.
- Putnam, J., & Duffy, G. (1984). A descriptive study of the active and interactive decision making of an expert classroom teacher. Research series No. 148. East Lansing. MI: Michigan state university, institute for Researching in Teaching.
- Redfield, D. L., & Rousseau, E. W. (1981). A Meta- analysis of Experimental Research on Teacher Questioning Behavior. *Review of Educational Research*, 51(2), 23-245.
- Richards, J.C., & Nunan, D. (1990). *Second language teacher education*. Cambridge: CUP.
- Richards, J.C., & Lockhart, C. (1990) *Reflective teaching in second language classroom*. Cambridge: CUP.

- Richards, J.C., & Lockhart C. (1988). *Reflective Teaching in second language classroom*. People's Education press: Peking, China.
- Rickards, J. (1974). Type and frequency of questions in processing textual material. *Journal of Educational psychology*, 66, 354 – 362.
- Rodgers, V. M. (1972). Modifying questioning strategies for teachers. *Journal of Teacher Education*, 23 (1), 58 – 62.
- Rosnow, R.L., & Rosenthal.R. (1999). *Beginning behavioural research: A conceptional primer*. (3rdEd). USA. Prentice Hall.
- Rozin, P., & Fallon, A.E. (1987). A perspective on disgust. *Psychological Bulletin*, 94, 397 – 412.
- Sanders, N. M. (1966). *Classroom questions: What kinds?* New York: Harper & Row.
- Schwandt, T. A. (1994) Constructivist, interpretivist approaches to human inquiry. In N. K.Denzin & Y.S. Lincoln (Eds) *Handbook of qualitative research* (pp. 118 – 137). Thousand Oaks, CA: sage.
- Schwille, J., Dembe'le', M., and Schubert, J. (2007). *Global Perspectives on Teacher Learning: Improve policy and practice*. *Fundamentals of Educational planning*, 84. Paris: UNESCO International Institute for Education planning (IIEP).
- Shomoossi, N. (2004). The effective of teacher's questioning behavior on classroom interaction. *The reading matrix*. (4) 96 – 104.
- Sitko, M.C. & Slemon, A.G. (1982). Developing teacher' questioning skills: The efficacy of delayed feedback. *Canadian Journal of Education*, 7 (3), 109 – 121.
- Siyakwazi, B. J. & Siyakwazi P. D. (1999). *Strategies in Teaching & Learning*. Harare: SapesBook.
- Smith, G.P. (1996). Efficacy and teaching mathematics. A challenge for reform. *Journal for research in mathematics education*. 7, 387 – 402.

- Stevens, R. (1912). *The question as a means of efficiency in instruction: A critical study of classroom practice*. New York: Teachers College, Columbia University.
- Strauss, A.L., & Corbin, J. (1990). *Basic qualitative research*. California. Sage publication.
- Sungginwati, D. & Nyuyen, H.T.M. (2013). Teachers' quality in reading lesson. A case study of Indonesia. *EJFLT*, 10(1), 80-95.
- Taba, A.L. & Levine, S. and Elzey, F. (1964). *Thinking in elementary school Children*. U.S. office of Education Department of health, education and welfare, cooperative Research project No. 1574. San Francisco state college.
- Strydom, H. (2002b). The pilot study: In A.S. Devos (ed), H. Strydom, C.B. Foun'e, C.S. L. Delpont: *Research at grass root for social science and Human service professions*. (2nd ed). Pretoria. Van Schaik publishers.
- Tan, Z. (2007). Questions in Chinese University EL classrooms: What lies beyond it? *RELC*, 38(1), 87 – 103.
- Tekene, M. L. (2006). Enhancing teachers questioning skills to improve children's learning and thinking in pacific island early childhood centers. *New Zealand Journal of teachers work*. V.3 (1), 12 – M23.
- Thompson, A. G. (1984) The relationship of teachers' conceptions of mathematics and mathematics teaching to instructional practice. *Educational studies in Mathematics*, 15(2), 105- 127.
- Thompson, G. (1997). "Training teachers to ask questions" *ELT Journal* Vol. 51/2 APRIL: 99 – 105.
- Tienken, C.H., Goldberg, S., & Dirocco, D. (2010). Questioning the questions. *Education Digest*, 75(9), 28 – 32.
- Underbakke, M., Borg, J.M., & Peterson, D. (1993). Researching and developing the knowledge base for teaching higher order thinking. *Theory into practice*, 32(3), 138-146.

- Uzuntiryaki, E. & Boz, Y. (2007). Turkish pre-service teachers' beliefs about the importance of teaching chemistry. *Australian journal of education*, 32(94).
- Vogler, K.E. (2005). Improve your verbal questioning. *Clearing house*, 79(2). 98-103.
- Wilens, W. (1982). *Questioning skills for teachers*. Washington D.C: national education association.
- Wimer, J.W., Ridenour, C.S., Thomas, K., & Place, A. W. (2001). High order of teacher questioning of boys and girls in elementary mathematics classroom. *Journal of education research*, 95, 84-93.
- Winne, P.H. (1979). Experiment relating teacher 'use of higher cognitive question to student achievement. *Review of educational research*. 49, 3-50.
- Wolf, D. (1997). The art of questioning. *Academic connections* 1-7. Retrieved July 23 from
- Wragg, E.C. (ed). (1984). *Classroom teaching skills*. London/ Sydney: Croom.
- Young, R. (1992). *Critical theory and classroom talk*. Cleveland: England.
- Zoch, R.F. (1971). *The effect of an individualised in-service programme on teacher questioning and student verb participation*. Doctoral dissertation, University of Houston.

APPENDIX 1
QUESTIONNAIRE FOR TEACHERS



THE UNIVERSITY OF ZAMBIA

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY, SOCIOLOGY OF EDUCATION

AND SPECIAL EDUCATION

Dear respondent,

REF: PRIMARY TEACHERS' PERCEPTIONS OF THEIR TRAINING IN CLASSROOM QUESTIONING SKILLS IN PRIMARY TEACHERS COLLEGES OF EDUCATION: A CASE OF SERVING PRIMARY SCHOOL TEACHERS OF LUKULU DISTRICT

I am a Post-Graduate student in Master of Education in Educational Psychology, and am conducting a research on the above subject. Kindly spare a few minutes to answer this questionnaire. The information you are going to provide will be purely for research and will be used as such. **You are advised not to write your name on the questionnaire.** Your cooperation will be appreciated.

Likando Mundia

1. Name of School.....

2. District.....

3. Location of the school

Peri- urban

Rural

4. What is your gender?

a) Male b) Female

5. Highest level of professional qualification

a) Certificate

b) Diploma

c) Degree

d) Masters

6. How many years have been teaching?

a) 0-5

b) 6-10

c) 11-15

d) 16-20

e) 21-25

7. What grade levels do you currently teach?

a) 1-3

b) 4-7

c) 8-9

SECTION B

8. Have you ever heard about the concept of classroom questioning skills?

Yes

No

9. If your answer to question 9 is yes, where did you first hear about it?

a) College

b) School

c) Specify-----

10. How did you hear of classroom questioning skills?

11. Do you understand what it meant by classroom questioning skills?

No

Yes

12. When you are teaching a lesson in your class do you use classroom questioning skills?

Rarely Always

13. How comfortable are you in using classroom questioning skills?

Very comfortable

Comfortable

Non comfortable

14. Do you think that you were adequately trained in classroom questioning skills at college of education?

Yes No

15. If your answer to question 15 is No, please explain.

16. If your answer to question 16 is No, how did you acquire classroom questioning skills?

17. Have you ever heard of learnt of low-order questions and higher-order- questions?

Yes No

18. If your answer to question 18 is yes, where did you learnt about them.

19. In my classroom I prefer using questions that are: (TICK)

(a) Closed, direct, recall, convergent, simple and factual

(b) Open, interpretative, evaluative, inquiry, inferential, divergent and synthesis

20 Explains why you use such type of questioning in your class.

21 Do you think that type of classroom questioning you use is related to the way you were trained and prepared in primary teachers colleges?

Very related

Related

Not related

22 Give reason to your answer in question 22.

23 Are teachers training college doing enough in preparing and training of teachers in classroom questioning skills?

YesNo

24 If your answer to question 24 is no, give reasons.

25 Any suggestions on how classroom questioning skills should be improved.

Thank you for participation

APPENDIX 2

TEACHER CLASSROOM QUESTIONING OBSERVATION SHEET

SCHOOL:

SUBJECT:

TOPIC :

DURATION:

CLASS SIZE:

TIME:

QUESTIONING USED BY TEACHERS IN THE CLASSROOM

S/N	QUESTIONING	CLASSIFICATION ACCORDING TO LOW-/HIGH- ORDER QUESTIONING	COMMENT
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APPENDIX 4

INTERVIEW GUIDE

1. How do you perceive the training and preparation you underwent at college in terms of your classroom questioning skills? Was it adequate?
2. In your lesson I noticed that you used a lot of low-order or High-order questions. Why did you use such type of questions?
3. Do you think the types of questions you use in your lessons are related to the way you were trained and prepared at college?
4. When you look at the primary teachers colleges of education, are these colleges doing enough in preparing and training primary school teachers in classroom questioning skills?

Appendix 5

Research Budget Proposal

Sn	Description	Quantity	Unity price	Total in Kwacha
1	Transport	Trips to and from the selected primary schools	K70000	6,300,000
2	Food	Breakfast and Lunch for eleven days	K50000	K1500000
3	Printing and Binding proposal	4 copies	K60000	K240000
4	Printing and Binding final research report	4 copies	K70000	K2600000
5	Reams of paper	02	K30000	K60000
6	Ballpoints	05	K1000	K5000
7	Rubbers	05	K1000	K5000
8	Pencils	05	K1000	K5000
9	Stapler and staples	01 packet	K70000	K70000
10	Flash disc	01	K200000	K200000
11	Recorder	01	K1000000	K1000000
	Total			K9,465000

APPENDIX 6

Research Time-Line

Activity plan	Jan- Feb 2012	March- April 2012	May- June 2012	July- Aug 2012	Sept- Nov 2012	Dec 2012- Jan 2013	Feb- April 2013	May- July 2013
1.Literature search and review	//////							
2.Proposal writing		//////						
3.Submission of final version of proposal			//////					
4.Design of instruments and pilot study				//////				
5.Field work					//////			
6.Data analysis						//////		
7.Report writing							//////	
8.Report finalizing and submission								//////