

THE UNIVERSITY OF ZAMBIA

**THE IMPACT OF CURRICULUM INNOVATIONS ON
PRE-SERVICE PRIMARY TEACHER EDUCATION
IN ZAMBIA.**

By

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CHAPTER ONE

INTRODUCTION

Overview

This chapter chronicles the innovations in pre-service primary teacher education in Zambia from independence up to the time of writing of this thesis. The chapter is organized in seven sub-sections comprising the following parts; introduction, statement of the problem, general objective, specific objectives, research questions, significance of the study, justification of the study from the sociology of education perspective, theoretical framework and definition of terms. The primary concern of this study was to investigate the impact of curriculum innovations on pre-service teacher education in Zambia.

During the past four decades, there have been major efforts to reform basic education system in Zambia. In teacher education, these efforts have been occasioned by a growing dissatisfaction with the way primary school teachers are trained and the quality of learning in schools. Proposals to reform primary teacher education in Zambia have become popular because primary teacher education programmes are generally held in low esteem and students preparing for primary teaching are perceived as weak academically (Musonda 2005). Issues surrounding these reforms are mainly two fold. One school of thought advocates for increasing the time for content or subject matter background during teacher training. The other school of thought lays emphasis on increasing the length of time for practical student teaching and field experiences. Therefore, the raging debate in primary teacher education in Zambia has generally been between putting emphasis either on subject matter or pedagogy.

The first innovation in the curriculum for pre-service primary teacher education after independence was the introduction of the *Zambia Primary Course (ZPC)* in 1967. Previously, primary school teachers were trained as either lower primary school teachers or upper primary school teachers. The *ZPC* was an experimental curriculum based on the New Peak Course, an English Medium Programme in use that time in Kenya (Chishimba 1979)

The second curriculum review which affected primary teacher education was from 1975 to 1977. The Education Reforms of 1977 regarded teacher education as a vehicle for social and economic transformation of the independent *Zambian* society. A teacher was expected to have a deep understanding of the society in order to serve the communities effectively. Thus, the second curriculum review resulted in the *Zambia Basic Education Course (ZBEC)*. Under *ZBEC* each subject was developed discrete without any element of integration.

The second Education Policy called *Focus on Learning* launched in 1992 adopted a rationalist approach to teacher education. Primary teacher training colleges were expected to focus their training on transforming students into competent and committed teachers.

The 1996 National Policy on Education (*Educating Our Future*) introduced radical changes in the training of primary school teachers. In 1997, the Teacher Training Inspectorate Unit of the Ministry of Education designed a programme called *Field Based Teacher Training Approach (FIBATTA)*.

This programme was intended to address the problem of shortage of qualified teachers. *FIBATTA* was premised on the competence-based curriculum aimed at developing, broadening and deepening the pedagogical and professional competencies of the trainees through active methods of study. *FIBATTA* was short lived and was discontinued barely three months of trial in all teacher training colleges. However, this strategy developed into the *Zambia Teacher Education Reform Programme (ZATERP)* funded by the Danish International Development Agency (DANIDA). *ZATERP* started as a pilot programme in three primary colleges of education, viz, Solwezi, Kitwe and Mufulira colleges of education. *ZATERP* ran successfully for three years. Based on the experiences from the pilot, the programme was taken to scale at all the ten Primary Colleges of Education from January, 2000. This curriculum is now called the *Zambia Teacher Education Course (ZATEC)*. The initial *ZATEC* programme from the year 2000-2007 was delivered through a two year course. The year based in the colleges was referred to as the college-based year. In the second year, students were attached to schools for school experience. This was referred to as the school-based year.

As from 2008, the current *ZATEC* course had been transformed into a two year residential course. The one year school-based experience had been phased out. School experience had been reduced to only one term. This is a shift again from increasing the length of time for student teaching and field experiences to putting emphasis on content or subject matter background which was discouraged in the initial *ZATEC* programme.

It is hoped that this change would improve the quality of graduates in terms of delivery of subject content. Unlike *ZPC* and *ZBEC*, *ZATEC* was based on learner-centred education and integration of subjects.

At the time of writing this thesis the Ministry of Education had plans of converting the existing two year certificate programme in Primary Colleges of Education to a three year Diploma Programme and to affiliate all primary colleges of education to the University of Zambia. However, it does not seem that the necessary preparations for this change have been completed and that a well designed system, strategy or mechanism is in place to push this reform through.

Global trends show that teacher education has been in the doldrums (Turney, 1977). Teacher education has been regarded as a conservative profession lacking a coherent theory on which its professional credentials have been founded. However, in recent years, change has become a growing feature of teacher education as exemplified by many international conferences on teacher education, a growing number of international teacher professional associations and the many scholarly conceptualizations of teacher education. The first trend is the change in notions of teacher training. The trend has been the adoption and preference for the term teacher education instead of teacher training. This general adoption of the term teacher education indicates the marked shift from a limited concept of training to that of the development of individuals with sensitivities, understandings and skills necessary for working creatively with children.

This notion has been accepted in Zambia, a case in point is the renaming of all teacher training colleges in Zambia as colleges of education.

Statement of the Problem.

Given Zambia's background on curriculum innovations in primary teacher education since independence, it is evident that Zambia appears to be struggling to establish a coherent primary teacher education curriculum. Some of the curriculum innovations that have been undertaken in Zambia seem to be initiated and financed by international capital in the name of technical assistance. However, the nature of technical assistance that is given is sometimes based on foreign experience without sufficient local participation. These sporadic curriculum shifts in primary teacher education appear to be drawn and implemented in a haste without a solid philosophical foundation anchored in research.

Commonwealth of Learning (2005) has observed that piecemeal reforms in pre-service primary teacher education in Zambia have not served the desired purposes as some of these changes look almost the same. Similarly, Manchishi (2007) has noted that since independence, several attempts have been made by the Ministry of Education to reform teacher training curriculum so that it is relevant and of good quality. In spite of all the efforts made so far, the problem of primary teacher training seems to persist. Little seems to be known about the impact of these innovations on primary teacher education because most of the programmes have not been evaluated. It is against this backdrop that this study sought to investigate the impact of curriculum innovations on pre-service teacher education in Zambia.

General Objective

This study investigated the impact of curriculum innovations on pre-service primary teacher education in Zambia.

Specific Objectives

With the view to achieving the general objective stated above, the following were the specific objectives of the study:

- 1.** To find out why pre-service primary teacher education has been subjected to frequent curriculum innovations.
- 2.** To identify and investigate the major agents of curriculum innovation in primary teacher education in Zambia.
- 3.** Collect views from teacher educators, officers at TESS, ECZ, CDC, Civil Society Organizations working in primary teacher education in Zambia, eminent educationists in Zambia, educational administrators and other stakeholders on curriculum innovations in pre-service primary teacher education.
- 4.** Investigate the impact of curriculum innovation on pre-service primary teacher education in Zambia.

Research Questions

The study sought to answer the following research questions.

1. Why is pre-service primary teacher education in Zambia subjected to frequent curriculum innovations?
2. Who are the major agents of curriculum innovations in primary teacher education in Zambia?
3. What are the views of teacher educators, civil society organizations working in primary teacher education, educational administrators and other stakeholders on curriculum innovations in primary teacher education in Zambia?
4. What is the impact of curriculum innovations on pre-service primary teacher education in Zambia?

Significance of the Study

The study attempted to provide empirical research findings on the impact of curriculum innovations on pre-service primary teacher education in Zambia. Teacher educators, education administrators, policy makers, curriculum developers and other stakeholders interested in primary teacher education may utilize this information in improving the teacher education curriculum in order to enhance the quality of primary teacher education in Zambia. The study has also contributed to the existing body of knowledge on curriculum issues on primary teacher education in Zambia.

Justification of the Study from the Sociology of Education Perspective

Sociology of Education promotes an understanding of the curriculum as a social system. By examining the functioning of the curriculum, sociologists of education may help educational practitioners to understand certain obstacles to curriculum innovation and show that curriculum innovation or curriculum change is in part a social problem calling for social solutions.

To a large extent, the curriculum is shaped by the culture of the society in which it operates. The curriculum embodies the knowledge, skills and aspirations of the people, it is also influenced by social values, social needs and social problems. If the curriculum remains static in a dynamic society, especially in periods of rapid social change, it is likely that the education which is meant to induct the young into society and to promote an intelligent understanding of it will only cater for needs and values which no longer exist.

Sociology of Education has been used mainly for deciding what the content of the curriculum ought to be. Notably in the writings of Emile Durkheim and Fred Clarke, Sociology has been invoked to arrive at judgements about curriculum objectives. Since the time of Durkheim, Sociologists have been interested in social, as distinct from psychological facts. "Social facts" were a central preoccupation of Emile Durkheim and Fred Clarke. Social facts were seen by Durkheim as incapable of explanations in terms of individual psychology as they exist outside and apart from individual needs. A language, for example, is there before an individual is born into the society which speaks it, and it

will be there after he is dead. An individual merely learns to speak it, as his forefathers did and as his descendants will. It is a social fact which can only be understood in relation to other facts of the same order. The individual merely passes through the social structure. It was not born with him and does not die with him. The totalities of social facts which compose the social structure are external to the individual and obligatory. An awareness of the nature of social facts is important when we are thinking of the content and purpose of a curriculum. It is sobering and even dispiriting concept for educationists, suggesting limits to what can be achieved by influencing individual members. It provides a valuable corrective to the utopian planning to which curriculum reformers are prone.

As Sociology is concerned with the facts of organized human relationships, it will illuminate our understanding of the curriculum by revealing school subjects not simply as intellectual, but as social systems. Sociological investigation of curriculum innovation may deepen our understanding of the curriculum as a social system. We can examine the sources of curriculum innovation and of resistance to innovation or change.

Kerr (1969) contends that there were three major sources of data for deciding curriculum objectives; information about the needs and interests of pupils; the social conditions and problems which the children are likely to encounter and the nature of the subject matter and appropriate forms of learning. Clearly, sociologists of education might be expected to contribute information about the social conditions which students are likely to encounter. In the analysis of social change, sociologists would indicate the likely shape of the future, which the curriculum must take account in view of the innovations.

Therefore, a study of the impact of curriculum innovations on pre-service primary teacher education in Zambia from a sociological perspective is an inquiry long overdue in primary colleges of education in Zambia.

Theoretical Framework

This study was guided by two major competing perspectives of teacher education that seem to have influenced planners of teacher education programmes world-wide. These are the *social market perspective* and the *platonic or rationalist perspective*. The theoretical understanding of some of the principles underpinning teacher education systems are based on the assumption that the epistemological relationship between educational theory and professional knowledge are central in shaping teacher education paradigms.

The *social market perspective* is based on economic principles. Education is seen as a process which must supply consumers (learners) with educational commodities, i.e., (competencies / skills) which may change in accordance with the educational needs of society. This, therefore, requires a teacher who keeps on learning in order to cope with such changes. This model sees the teacher as a facilitator and not an expert in full control. A teacher education programme modeled on this perspective puts emphasis on the following: Practice at the expense of theoretical foundation of learning and teaching; teacher as facilitator, guide, adviser rather than expert, learner-centred approach to teaching, school-based training at the expense of college-based training, teacher as a life long learner and formative assessment rather than summative assessment.

The Field Based Teacher Training Approach (FIBATTA) and the initial Zambia Teacher Education Course (ZATEC) appear to have been modeled on this perspective of teacher education.

On the other hand, the *platonian or rationalist perspective* considers a teacher as a rational individual who is in full control of his profession because he or she understands well the theoretical foundations of the profession as well as the subject knowledge. To have such a teacher, the college-based training is most crucial during which the individual is subjected to theories and principles of learning and their subject knowledge is enriched. But before graduation, the prospective teacher must be given chance to do school teaching practice to put the theories and teaching techniques learnt into practice. An individual who goes through this process is seen as an expert who do not only understand how to teach but also what to teach. A teacher education course modeled on this perspective puts emphasis on the following: theory at the expense of practice; teacher as an expert-teacher should be knowledgeable in the theories of teaching as well as subject content; College-based training at the expense of school-based training and summative assessment at the expense of formative assessment. The Zambia Primary Course (ZPC), the Zambia Basic Education Course (ZBEC) were premised on this model. The current transformed ZATEC (2008) two year residential course is also premised on this model. Similar to these two major philosophies or perspectives of teacher education are the three ideal types of teacher education paradigms presented by Stuart (1999) which she calls *Sitting by Nellie*; *Ivory Towers* and the *reflective Practitioner*. These nick names seem to be embedded in the actual theory-practice relationship these paradigms imply. For

instance, *Sitting by Nellie* carries the criticism levelled at placing more emphasis on practice than theory. The opposite is true of the *Ivory Tower* paradigm which is criticized for imparting theories that have little relevance to practice.

The *reflective practitioner* sounds like an ideal paradigm, balancing up theory with practice and producing teachers as independent thinkers.

Definition of Terms

Curriculum reforms in this study refers to changes to the content and organization of what is taught, within the constraints of social, economic and political contexts. The term 'reform' is typically used here to refer to changes instituted from above.

Innovation in this study refers to an idea or practice which is perceived to be new and also the process by which that new idea or practice becomes adopted.

Teacher Education in this study refers to professional education and training of teachers.

Diffusion in this study refers to a process concerned with the spread of a new idea or practice from its point of origin to its adopters. The term implies neutral action by the innovation's developers or adopters and, in effect, means the spread of an innovation by natural means such as word of mouth.

Dissemination refers to deliberate process to spread a new idea or practice from its origin to adopters. Dissemination is more specific than diffusion with an emphasis upon deliberate, goal-directed activities carried out by change agents to facilitate the adoption of an innovation.

Change agents refers to significant individuals and groups or organisations involved in the process of facilitating change through establishing communication links between developers and clients.

Adoption refers to the initial acceptance of an innovation and its rate of acceptance within a system.

Change is used as a generic term in this study to incorporate a number of associated concepts such as innovation in order to analyse and explain curricula phenomena. Change is seen as the process of transformation of phenomena and is used in analyzing that transformation. Change has also been used in this study to consider the dimensions of rate (speed), scale(size), degree(thoroughness), significance(profoundness) and direction(orientation). It also describes what has happened, particularly as the result of the dissemination of an innovation.

Decision makers refers to individuals or groups who, because of their professional status or position, are able to make specific decisions about what is to be taught, when, how and to whom.

Stakeholders refers to individuals or groups of persons who have a right to comment on, and have input into school or college programmes. They may have the authority to ensure that their inputs or suggestions are implemented. Stakeholders may not have official powers but rely upon their modes of persuasion, such as parent groups or community-based organizations.

Lobby Groups are groups that hold common interests and endeavour to persuade or convince authorities that certain changes should occur. They may advocate certain ideals or may focus upon certain activities or processes that should occur in institutions of learning.

Professional Associations refers to associations that exercise influence at local and national levels. Their activities may include lobbying for or against political actions, publishing curriculum guidelines for example and establishing networks, workshops and conferences in the activities they are interested in.

Summary

This Chapter presented an introduction on curriculum innovations in pre-service primary teacher education in Zambia. It chronicled the changes in primary teacher education curriculum from independence up to the time of writing this present study. The purpose of the study was to investigate the impact of curriculum innovations on pre-service teacher education in Zambia. The theoretical framework of the study was informed by two major competing philosophies or perspectives on teacher education that have influenced planners of teacher education programmes world-wide, i.e., the social market perspective and the platonic or rationalist perspective. The chapter ended with definitions of terms.

CHAPTER TWO

THE CONCEPT OF CURRICULUM INNOVATION AND CHANGE

Overview

This chapter discusses the concept of curriculum innovation and change. It is important to understand what is meant by curriculum innovation and curriculum change. The distinction between curriculum innovation and change has been discussed in different ways by various scholars. The chapter also outlines the models and strategies of curriculum innovation.

In everyday usage the words *change* and *innovation* are frequently used interchangeably and while this is also to be found in the literature, a clear distinction between the two should be made. An innovation is seen as being something which is essentially new rather than a re-ordering of something which already exists into a new pattern; change calls for a response but innovation requires initiative (Owen, 1983). In the context of education this notion of innovation seems somewhat strict, especially in the light of the commonly held view that there is nothing really new in education. A more lenient view, while acknowledging that the terms change and innovation are used synonymously in schools or colleges, makes a distinction between the two and suggests that it would be incorrect to regard every change as an innovation. According to this view, an innovation must imply an improvement towards a predetermined objective and always presupposes one or more qualitative criteria (Marklund, 1982). The literature abounds with varied and sometimes conflicting definitions of innovation, but there appears to be general

agreement about three aspects: first, that it is fundamental in nature; secondly, that it is deliberate and planned; and thirdly that there is the intention of improvement. One definition, for instance, emphasizes the fundamental nature of innovation when it states that any major innovation implies a change in the culture of the school so that 'authority relationships, communication networks, status groupings, and even friendship cliques are forced to change' if the innovation is to survive (Schmuck,1984:108).

In a frequently quoted definition deliberate planning and the improvement of performance are emphasized as characteristics of an innovation:

Generally speaking, it seems useful to define an innovation as a deliberate, novel, specific change which is thought to be more efficacious in accomplishing the goals of a system... it seems helpful to consider innovations as being planned for, rather than as occurring haphazardly. The element of novelty, implying recombination of parts or a qualitative difference from existing forms, seems quite essential (Miles, 1984:14).

Similarly, another definition regards innovation as a 'deliberate attempt to improve practice in relation to certain desired objectives'(CERI, 1973:36), while an earlier study offers a similar but elaborate definition:

We understand innovation to mean those attempts at change in an Educational system which are consciously and purposefully directed with the intention of improving the present system. Innovation is not necessarily something new but it is something better and can be demonstrated as such (CERI, 1969:13).

The emphasis on the qualitative aspects of innovation implies that an innovation is not introduced simply for its own sake, and this point is made explicitly in another definition: Noel (1984:29) states that innovation means any change in one component of the educational system which is not made simply for the sake of change but with the

intention of promoting improvements in the aspect concerned and, having regard to the close interdependence of all such aspects in the system as a whole.

Bourke (1994) notes that the term 'reform' is typically used to refer to changes instituted from above. This implies that to a large extent only government decision making can reform education. Bourke questions whether governments are always able to reform (to make better), quite often the changes implemented by governments disadvantage some social groups.

While there is a good measure of agreement about the fundamental, deliberate and improvement aspects of innovations, there is less agreement about their uniqueness, as some of the definitions already quoted indicate. The CERI (1969) definition says that an innovation is not necessarily something new and Miles (1984) refers to a recombination of parts, while Owen (1979) rejects the notion that an innovation can be merely a rearrangement of old constituent parts and looks for essential newness. A significant contribution to this debate is made by Rogers and Shoemaker (1981:19) who argues that:

An innovation is an idea, practice or object perceived as new by an individual. It matters little so far as human behaviour is concerned, whether or not an idea is 'objectively' new as measured by the lapse of time since its first use or discovery. It is the perceived or subjective newness of the idea for the individual that determines his reaction to it. If the idea seems new to the individual, it is an innovation.

This observation is about innovations in all fields, but it is particularly relevant to educational innovations which frequently require teachers to change attitudes, relationships and roles. There would appear to be shortage of educational innovations and

it is the implementation rather than the creation which presents certain difficulties and problems; and these will operate just as much if the idea or practice is new only to the individuals concerned or is 'objectively' new.

This leads to the view of innovation which will be taken in this thesis; it brings together elements of some of the definitions quoted earlier. An innovation is an idea, object, or practice perceived as new by an individual or individuals, which is intended to bring about improvement in relation to desired objectives, which is fundamental in nature and which is planned and deliberate. On the other hand, change is seen as a continuous reappraisal and improvement of existing practice and which can be regarded as part of the normal activity of curriculum development.

By definition, innovation is fundamental in nature and many educational innovations necessitate considerable changes in teachers' attitudes. Some involve teachers in changing their traditional roles and bring about new kinds of relationships both among teachers and between educators and their pupils. Team-teaching is an example of such an innovation. Involvement in team-teaching could mean, for instance, among other changes, that a teacher would move from the privacy of a self-contained classroom to teaching in the presence of colleagues, from planning individually to planning jointly with colleagues, from teaching groups of, say, thirty pupils to working with groups of varying sizes up to as many as a hundred pupils. Not all teachers can make such changes in behaviour easily, even if they are willing to try.

Related to this is the fact that an innovation frequently requires teachers to give up practices in which they feel secure and display high levels of competence and to adopt new practices in which, at least temporarily, they feel less secure and in which they might possibly be less competent, and some may not be willing or able to tolerate even a temporary incompetence or to tolerate feelings of insecurity.

The extra work load that innovation brings should not be overlooked. The tasks of planning and implementing innovations bring work in addition to the normal teaching duties of teachers. Some teachers find participation in innovation so stimulating and exciting that they willingly accept the extra work; others might accept the extra work for other reasons: they might, for instance, see involvement in innovation as a way to promotion. There are other teachers, however, less enthusiastic about innovation or perhaps deriving their professional satisfaction from their classroom activities, who are much less willing to take on the additional task of innovating.

Closely related to the extra workload is the time factor. There are two aspects of this: time needed during the working week for planning and the period of time over which planning needs to be carried out. The tasks involved in the planning and implementation of innovations are time-consuming in both the dimensions mentioned, although it is the first which teachers often highlight as a problem. It is said that it is difficult to find time during the week when teachers can come together for planning purposes. Undoubtedly there are problems in this respect, but teachers in some schools find ways of overcoming the problems, either through skilful timetabling arrangements or by meeting after school

(Holt, 1976 and Nicholls, 1979). The long-term nature of planning and implementation is less frequently identified by teachers as a problem. Rather, they tend to underestimate the time needed. Innovators are frequently impatient and want to see their ideas put into practice quickly and this can result in the ideas being insufficiently examined and discussed; the final consequence of such impatience is partial or inadequate implementation.

The cost of innovation is often cited as a difficulty. It is a fact that some educational innovations are expensive. This would be true of those innovations that involve new materials or equipment. However, even in the case of such innovations it may be pertinent to ask not only whether the innovation is going costly, but whether it is going to be more costly than that which it is to replace. Not all innovations necessitate expensive equipment or materials and it would be most unfortunate if teachers were to think that the present economic restrictions of necessity preclude innovation. Indeed one can envisage how economic difficulties might actually generate innovation. For instance, a secondary school which is unable to replace teachers who leave might have to implement significant curriculum and organizational innovations.

One factor which sometimes makes it difficult to persuade teachers to become involved in innovation is the difficulty of showing that the innovation will be more successful than the present practice. The definition of innovation proposed earlier includes the words 'intended to bring about improvement'. The problem, common enough in education, is how to show that there is improvement.

The difficulties surrounding evaluation in education have frequently led to a situation in which teachers involved in innovation have ignored any evaluation of them. It has been suggested elsewhere (Nicholls and Nicholls, 1985) that any new curriculum can be more than a hypothesis to be tested for whether it will lead to the achievement of desired ends. However difficult it may be, criteria for the evaluation of an innovation should be included as an essential element. No guarantees can be given that the innovation will prove to be effective, but at least there will be some evidence on which to base decisions about its future.

Given that there are so many problems and difficulties associated with innovation it seems reasonable that teachers may ask why they should innovate. It has become almost a platitude to state that we live not only in a period of rapid social change but also in a period in which the rate of change is still increasing. As institutions established by society, schools or colleges are affected by changes in society, and, to some extent at least, what takes place in schools and colleges has an influence on certain aspects of society. If society is changing significantly, then it can reasonably be expected that schools or colleges, as institutions of society, should also change significantly. This is not to suggest, however, that schools or colleges should respond indiscriminately to pressures emanating from other elements of society. Any response should be deliberate and planned and based on an explicit well-thought-out rationale so that decisions made can be defended and justified (Walton and Walton, 1976; Nicholls and Nicholls, 1978).

Not all changes in society may be considered by teachers to be desirable. Indeed, teachers are sometimes expected by the general public to redress some of the changes manifested by young people: changed attitudes to authority, vandalism and hooliganism. Teachers probably have insufficient power or influence to put to rights the ills of society, however willing they may be to try. The problem of teachers having different values from the rest of society is very difficult to cope with. Up to a certain point it might be considered desirable for teachers to display some idealism through what they are trying to achieve, but there are dangers in moving too far from reality. If the gap between the values and attitudes of teachers in school and those of the rest of society, particularly pupils, becomes too great, then schools are likely to be ineffective in carrying out their purposes. Pupils are likely to become apathetic, alienated and perhaps disruptive and in these circumstances desired learning will not take place. It is well known that there are schools that have large numbers of such pupils and while it would be unfair and untrue to suggest that this behaviour is the result of the schools' unwillingness to innovate, it might be considered prudent for all teachers to examine rigorously the curriculum, organizational arrangements, relationships, attitudes and values that operate in their schools.

The rate of innovation

Several writers comment on the slow rate of change in the field of education. Much of the early work in this area was carried out in the United States and one of the earliest writers to comment on the slow rate was Ross (1958) whose observations on a 150 studies were later substantiated by Mort in Print (1998). These early studies indicated that in the American school system innovation went through a very slow process and followed a

predictable pattern. There was typically a period of fifty years between insight into a need and the introduction of a way of meeting that need that was destined for general acceptance. Another fifty years was then required for the diffusion of the innovation. Mort further points out that the slow rate of innovation can be speeded up under certain circumstances, namely, when there is public demand, a receptive professional leadership in the schools or colleges, and inexpensive and all but self-teaching instructional materials. On the other hand, some studies show that the rate is faster than was found by Ross and Mort. In a study of the rate of adoption of a Mathematics Programme in a country, Carlson (1964) found that almost 50 percent of superintendents had adopted it by the fifth year. He did, however, find the same S-shaped curve noted by Ross and Mort, representing the acceptance process over time, which indicated that the adoption rate was slow in the early period, much faster in the middle period, and then slow again. Carlson's explanation of this phenomenon is that adoption is not an independent and isolated act since adopters influence each other. Brickell in Print (1998) agrees that the rate of innovation has increased. He noted that the rate of innovation in New York State more than doubled within fifteen months of the launching of the first Russian sputnik.

While accepting that the rate of educational innovation has speeded up several writers feel that it is still too slow and they offer either reasons why this is so or proposals to increase the rate still further. Differing adoption rates for different innovation are noted, thus indicating that the nature of the innovation itself might be an influential factor

(Carlson, 1975). In a review of a number of studies it was noted that some of the significant factors were cost of the innovation, congruence with the system and support during implementation (Miles, 1974).

It is argued that research should be linked to innovation for a number of reasons, one being the relationship between research and the speed of innovation. One effect of research is thought to be that it might eventually increase the speed of innovation if the results are favourable to the innovator. It is also suggested that results might compare the rate of diffusion of different kinds of innovation in order to try to show what are the chief supports and resistance to innovation (Young, 1975). Another view is that education might learn from the experience of agricultural innovation in the United States with its technological revolution and its use of change agents. Coombs (1978) puts forward the following hypothesis:

Before the creation and adoption of innovations can be greatly speeded up, there must be, first, a widespread transformation of the attitude toward change in education, by the public and educators alike; second, the creation within education of new institutional means and personnel whose prime concern is to seek improvements and innovations; and third, the fostering within teacher training colleges of attitudes that help make future teachers more receptive to innovations, thereby enabling education to engage in a vigorous and continuing process of self-renewal and advancement (Coombs, 1978:119).

Several reasons are offered as a partial explanation of the slow rate of innovation in schools. The first is the absence of a change agent who is outside of and free from the school he is trying to change. Secondly, it is claimed that schools are handicapped in innovation activities by the weakness of the knowledge base of new educational practices, and it is pointed out that it is rare for an educational innovation to be backed by

solid research and even rarer for one to be fully developed and subjected to rigorous trial and experimentation. The third reason concerns the organizational characteristics of schools and particularly the relationship between the school as an organization and its clients. Reference is also made to the 'domesticated organisation' of schools which means that the organization is protected and cared for in a number of ways. It does not compete for clients; a steady flow is normally assured. There is no struggle for survival; existence is guaranteed. Funds are not closely related to performance. As a result of this kind of security and stability the need for and interest in innovation are reduced (Carlson, 1965). The lack of incentive for schools to adopt new ways is given as a further explanation of the slow rate of innovation and a contrast is made with the profit motive in business or industry. In addition there is the difficulty of assessing the extent of the success of educational innovations which acts as a disincentive (Owen, 1970).

A wider view suggests a number of factors which inhibit the rate of innovation, some general and others more specific to education. Traditionalism, laziness, fear and insecurity are the general factors mentioned. It is acknowledged that traditionalism is not always bad since stability may be desirable in some circumstances. Fear of failure is considered to dull the appetite for innovation, especially in those who have an established professional reputation. Innovation requires hard work and it is suggested that 'too often an aura of respectable consideration is used to clothe the ulterior motive of laziness'(Miller, 1967:10). Miller also suggests a number of more specific factors that might affect the rate of innovation in education: the rut of experience which can give a false security(but which can also have a positive side), administrative reticence,

educational bureaucracy, insufficient finance, community indifference and resistance, inadequate pre- and in-service teacher education programmes and inadequate knowledge about the process of change. Miller, like other writers, regards this factor as the major obstacle and he makes three additional points about it, which he describes as 'myths'. He believes that it is the political scientist's concept of planned change that is imagined, rather than that of the social psychologist, and that planned change is thought of by some with overtones of 1984 and *Brave New World*. He believes, too, that there is a widespread notion that a good product will succeed on its own merits and that the introduction of new educational ideas can be final: 'Too often an innovation is introduced as 'the answer' rather than as something good but not perfect that can be improved with experience and careful study' (Miller,1977:18). Some teachers may well disagree with those writers who argue that the rate of innovation is still too slow, pointing out that the past two decades have seen schools involved in considerable innovation. In response to this viewpoint, some observers would claim that few innovations are having a profound effect on pupils' learning, and so there emerges an image of much superficial innovation, perhaps justifying Musgrave's (1974) 'cheap, meretricious and gimmicky' innovation. To devote time, energy and resources to innovative efforts which have such outcomes is both wasteful and disappointing. Moreover, recognition of factors that might inhibit innovation is the first stage in overcoming the problems.

Reasons for and Sources of Innovation

While it might be thought by some that the rate of innovation in education is slow, it is generally accepted that the rate has accelerated in recent years. The launching of the first Soviet satellite in 1957 is often cited as marking the beginning of the upsurge of

innovation in the United States which was seen as necessary if the nation was to survive. However, there are other reasons besides competition with other nations for an increase in educational innovation.

Schools as social institutions will tend to change more rapidly during periods of general social change. The growing demands of an affluent society for a more highly educated workforce and for increased cultural aesthetic activities are also related to educational innovation. Growth in knowledge in contemporary America and increases in technological ability to handle and retrieve information are considered to be influential on both the content and rate of educational innovation. From the British viewpoint, similar reasons are offered. The growth in knowledge, population increase which has resulted in greater pressures on education, and the egalitarian influence which has resulted in the raising of minimum standards of education, have all brought about innovation (Young, 1975). The presence of large numbers of unmotivated students is given as another reason for innovation. It is also suggested that the growth of knowledge has not only made the traditional syllabus obsolete but has led to a weakening of the boundaries of academic disciplines. Some educators innovate not only because they feel that existing arrangements are inadequate but also to relieve their own boredom. Innovation dispels the fog of boredom that hovers over everything we do in our classrooms (Trow, 1970: 291). This unusual viewpoint is taken even further by the suggestion that innovations in education can be justified for their own sake almost regardless of their outcomes.

Dynamics of Curriculum Change

Curriculum change invariably reflects change in the society at large and education in general. Hence most of what is dealt with in curriculum change with colleges of education addresses ways of implementing change effectively. A specific curriculum innovation may lead society in changing in a particular direction, but usually curriculum change reflects societal change. Consequently, when we consider curriculum change we need to include both the content of that change as well as the process by which that change comes about. By content, we mean, the knowledge, skills, concepts, understandings, values and so forth associated with the material concerned, such as a new History Syllabus or a Primary Mathematics Syllabus. The change process refers to means by which teachers will be introduced to that content and how they will be convinced to adopt and implement it. This requires the use of appropriate change strategies to convince teachers of the need for the change, the value in participating in the change and importance of developing appropriate perceptions, beliefs and actions that accord with that change. An important beginning is for curriculum developers and all participants in the educational process, to be aware of the generic forces of curriculum change if they are to survive effectively.

As the fast pace of curriculum change continues unabated, driven by the increased politicization of curriculum, so those involved in developing and implementing curricula will need to know more about the nature of change and how to deal with it purposefully.

Curriculum, being the essential heart of schooling, has experienced enormous swings with the pendulum of change.

As curriculum is concerned with the *what, how, when* and *so what* question in teaching, it also has the scope for multidimensional change. However, before examining the nature of that change, it is useful to distinguish the significant terms employed in the literature.

Change as we have noted is a generic term used in education to incorporate a number of associated concepts (innovation, adoption) in order to analyze and explain curricula phenomena. Change is, in effect, the process of transformation of phenomena in analyzing that transformation it is useful to consider the dimensions of rate (speed), scale (size), degree (thoroughness), significance (profoundness) and direction (orientation). It usually refers to a general concept which describes what has happened, particularly as the result of the dissemination of an innovation. Much of curriculum is concerned with planned change, which may be defined as a deliberate and collaborative process involving a change agent and a client system which are brought together to solve a problem or, more generally, to plan and attain an improved state of functioning and applying valid knowledge (Bennis in Print 1993). Most of what is addressed in curriculum change is some form of planned change.

At any one time the curriculum of a school or college is subjected to considerable pressures to change from its current situation. But the question is where do these pressures come from and what do they mean for the teachers or college lecturers? Pressures emerge from what Skilbeck (1984) considers to be four principal sources.

Skilbeck (1984) suggests that changes to the school or college curriculum reflect four major inputs: changes in society (indirect and direct) and changes in education (indirect and direct).

Curriculum change in schools reflects changes in society at large. Such changes are invariably indirect in nature and the association or linkage between societal and curriculum change is rarely a perfect match. Nevertheless, many societal changes may have significant impact upon the school curriculum. Skilbeck suggests that the school curriculum responds to changes in society which explicitly and deliberately enlist curriculum policy and practice as a means of achieving stated goals and ends. These include for example, attempts to encourage schools to show greater awareness of developmental issues, or problems of poor governance. In recent years the school curriculum in Australian schools has changed to accommodate such direct pressures as new standards of literacy, enhanced numeracy skills, environmental studies and peace studies. These examples demonstrate how deliberate changes have occurred in schools as a response to societal change. In the immediate future we shall witness substantial change to the post-compulsory curriculum in our schools and colleges as the curriculum and schools react to numerous societal changes. Finn (1991) and Mayer (1992).

Within education itself, changes occur which impinge or implicitly challenge existing curriculum practices and policies. While Skilbeck states that these are internally based, they obviously reflect aspects of the outside society.

Nevertheless, internally instigated changes (those emanating from within education systems) can have a profound effect upon school or college curricula. Skilbeck suggests that changes may be made or sought in curriculum policy and practice to promote certain ends or achieve particular goals in the education system.

Curriculum Change Process.

In some countries schools or colleges encounter at least three layers of curriculum change, i.e. national, provincial and school levels. Quite often teachers have been exposed to embryonic changes resulting from a 'national curriculum', a set of national curriculum statements designed to provide direction for curriculum across the states and territories (Kennedy, 1989; 1991). Such curriculum changes have an impact on classroom teachers. A second and currently more profound degree of impact in curriculum change is the state level of curriculum development. In some countries each state has a curriculum and assessment agency which is responsible for devising, implementing and assessing certain system-level curricula. The state department of education, or the curriculum and assessment agency, also has responsibility for curricula in primary schools and sometimes in colleges of education. The third level of curriculum change sometimes results from initiatives at school level. This may result from attempts to address the needs of diverse students. Contextual factors, such as language background, and so forth, require teachers in schools to reflect upon their curriculum offerings in order to make appropriate changes or to develop more suitable curricula. If teachers and curriculum developers are in a position to understand the nature of the change process, they are also better served to take appropriate action. In particular, teachers can relate to the various problems thrown up by change as it affects their school.

Typical questions posed in schools by teachers include: *Do we need this change? Why has this change arisen? How will this change affect us? What ways can we best support or oppose this change? Will this change improve the quality of learning? How can we ensure the continuance of this change?*

Curriculum change, it has been said, reflects the broader changes in education and the social system at large. But the question that needs to be answered is: *How can curriculum change be taken aboard effectively in educational institutions?* There has been extensive research in this area and most curriculum writers agree that three or basic phases of the curriculum change may be distinguished (Fullan, 1982, 1987; Miles et al., 1987; Smith and Lovat, 1991; Print, 1988).

It has been observed that *necessity* or *need* is the driving force for the curriculum change process. The beginnings of the curriculum change process lies in expression of concern, dissatisfaction or need with the current curriculum or curriculum practices. The expressed need may come from a variety of sources such as teachers, students, parents, administrators, employers, educational systems or some combination of these sources. Change will not occur without this need being present, although not all individuals perceive the same need for change, while others are not aware of the need for change at all. At times persuasive methods to promote change are necessary if change is to succeed. For example in recent years, all educational systems within Australia have experienced substantial and profound curriculum change.

In many cases the need for these changes was perceived by a small group of powerful decision-makers who then sought to convince others that the need and direction of proposed curriculum change was indeed appropriate. What is cardinal about the *need phase* is the recognition and acceptance of the *need for curriculum change* by a substantial majority of those involved. For example if teachers do not recognize and accept the need for a particular curriculum innovation they will become resistant to it and place the success of the curriculum in jeopardy. Thus the first phase of successful curriculum change may involve those initiating the change in the process of convincing change participants as to its value. To facilitate that process the characteristics of innovations – relative advantage, compatibility, complexity, trialability and communication – should be employed purposively. Politically inspired curriculum changes are experienced in many parts of the world.

Another important phase in the curriculum change process is the *adoption phase*. Adoption refers to the deliberate acceptance of an innovation to resolve an expressed need. After seeking information to resolve the problem, alternatives may be examined and this process serves as a step towards consolidation of change. From amongst the many alternatives available, an attempted resolution or innovation is decided and accepted. At this stage, however, the innovation is by no means secure within the institution. Dissemination or diffusion of information about the proposed change occurs with varying degrees of success within educational institutions.

Significant works in the literature on educational change (Fullan, 1982, 1987; Huberman and Miles, 1984; Miles et al., 1988) suggest a number of factors that codetermine adoption rates within institutions. Among the important factors in accounting for the successful adoption of the change are; access to information of decision-makers; alternative innovations in competition; central administrative support for a particular change; shared vision of the need for change; good quality innovation/change programme; funding availability to support implementation; purposeful role and effectiveness of change agents; significant and sustained community pressures and, most importantly state government department position on the proposed change. These factors will have a significant impact upon how willingly the change is adopted by teachers in schools. The next section on strategies for curriculum change provides specific examples of how the adoption procedure may be deliberately manipulated, particularly by significant change agents, to ensure a high adoption rate and subsequently an effective implementation, leading to successful institutionalization.

The third phase in the curriculum change process is the *implementation phase*. The implementation phase could be considered as a continuum, stretching from the adoption of an innovation until its complete acceptance or institutionalization. In education, implementation begins with the initial attempts by educators to effect the innovation into institutions. As this phase progresses, participants usually develop confidence and expertise with the innovation and so it has a greater chance of success. This is a crucial phase in the change process.

Though the innovation may be adopted, few participants or even change agents would guarantee successful implementation to the institutionalization phase. Indeed the innovation will succeed or fail in large measure by how effectively it is implemented.

The implementation phase may not be successful for various reasons. The rate of acceptance may be slow and this would affect its usage rate. It is common to have innovations that have failed to gain substantial acceptance at the implementation phase.

There are several factors that may influence the effectiveness of the implementation phase and hence the rate at which the innovation is accepted and used. These may be categorized as: Strategies for enhancing change; characteristics of the innovation; internal nature of the organization and characteristics of the broader social context.

The implementation phase of any change process will be enhanced if the internal nature of the receiving organization and the characteristics of the social context are conducive to change. Another important factor concerns the internal nature of the organization undergoing change. Institutions that have an internal means to facilitate change will be in a favourable position to make the implementation phase more effective. For example, a school experiencing difficulty matching student needs with existing curricula. If the school has a collaborative administration, the means are available to implement change effectively. At a systematic level, an educational system which has effective lines of communication, strong leadership, adequate support services, significant administrative commitment to the innovation and so forth, then successful implementation can occur.

Similarly, if society at large is desirous of a particular change, or is being pushed towards a changed direction, and there is political support for the change, such as a new curriculum structure, then effective implementation of the curriculum will be enhanced. Society would perceive it as time for change and would be supportive of curriculum initiatives which would result in producing substantive change. Implementation which is the third stage in the curriculum change process shows that the innovation is gaining strength but its transformation into the fourth phase cannot be guaranteed. In effect, the implementation phase is a testing procedure which will determine the innovation's ultimate fate. Every innovation exists somewhere along an implementation continuum ranging from non-implementation to complete acceptance.

The fourth phase in the curriculum change process is the *institutionalization/continuance phase*. This phase may take time and change cannot be considered to have occurred successfully until institutionalization is evident. Many innovations appear to succeed in the earlier stages only to flounder when exposed to the broader context for which they were intended. Many innovations in curriculum receive artificial support in the form of finance, consultants, administrative favour and so forth during the early stages of implementation. An acid test for the success of an innovation is to gauge the effectiveness of the innovation on the removal of those crutches. Should the innovation remain in place then the institutionalization phase will have occurred and change been effected. Quite often in curriculum innovation, the removal of these supportive factors leads to the demise of the innovation.

Some curriculum innovations in Africa fail after the removal of supportive props such as financial support in case of international funded projects. Facilitating the achievement of institutionalization is a major goal of those who would bring about planned educational change such as change agents in a school or college curriculum. To enhance the achievement of that goal within educational organizations, in relation to curriculum change, teachers and curriculum developers need to consider the following factors:

- Strong administrative commitments.
- Positive pressure and support from within the school.
- Resource allocation to fund the change.
- Removal of competing practices.
- Believable evaluation of innovation.
- Linked with current classroom practices.

The factors stated above are critical to the institutionalization/continuance phase of the curriculum change process according to Fullan, (1982, 1987); Huberman and Miles, (1984) and Miles et al., (1988). Institutions lacking in support and which are essentially destabilized by high staff turnover, inadequate leadership support, low levels of resources, poor support services and constant student mobility, have difficulty institutionalizing change. Despite the need for change in such institutions, the status quo will undoubtedly remain.

Curriculum change strategies

A significant congruence of ideas exists in the literature about change strategies and how this change could and should occur. A minimum requirement to effect planned change within institutions of learning such as schools or colleges is some form of plan or method procedure. These procedures are called strategies and a wide range is available for change agents and those who would effect change. Most planned change in institutions of learning such as schools or colleges involves the implementation of specific innovations. As already pointed out innovations are objects, ideas or practices perceived to be new by the receiving audience. The question posed by those who wish to implement the change is: How can these innovations be adopted, implemented and institutionalized effectively in institutions of learning such as schools or colleges? Educational research shows that a high degree of consensus exists with regard to curriculum change strategies.

Three main groupings of change strategies have been identified by researchers in curriculum issues such as Miles, et al., (1988); Chin, (1967); Bennis, Benne and Chin (1976). Of the various typologies of curriculum change strategies, the most commonly accepted terminology has been that of Bennis, Benne and Chin (1976). However, one interesting feature about curriculum change strategies is the high degree of similarity between the change strategies advocated by the various authors. Using Bennis, Benne and Chin as a guide, it is useful to examine these classifications of change strategies as a means for devising planned change in the curriculum. The three main curriculum change strategies are the *rational-empirical strategies*; *normative-re-educative strategies* and the *power-coercive strategies*.

Rational-empirical strategies

The rational-empirical strategy to curriculum change is predicated on the understanding that people are reasonable and will therefore act in a rational manner. Advocates of these strategies argue that, when exposed to an innovation, people will react according to their best interests, that is, when aware of an innovation, seeing its inherent value to themselves, people will adopt it. Strategies using a logical and rational justification rely upon the active and effective dissemination of knowledge in order to link the innovation with potential users. Those users, acting rationally, will then seek the innovation as a logical solution to their problem and thereby adopt it. In these models the change agent plays an active role, which centres on facilitating dissemination of knowledge about the innovation. Typically in institutions of learning such as schools or colleges, with the implementation of a curriculum innovation, dissemination is achieved through holding numerous workshops, seminars and demonstrations to illustrate the innovation's inherent value. General displays of curriculum material, perhaps extended by the use of promotional brochures, is a favoured way of providing information to teachers who then, exposed to the innovation, perceive its value adopt it.

Rational-empirical strategies of curriculum innovation are based on a positive, optimistic view of people and have been employed frequently by educational systems in various parts of the world. Examples of innovations adopted using rational approaches include conference writing in primary school English; Uninterrupted Sustained Silent Reading (USSR) or similar reading programmes in secondary schools, the use of video-recorders, computers and increased utilization of audio-visual equipment in learning.

In many instances teachers have realized the inherent advantages of these products and procedures and consequently adopted them. Hoyle (1976) suggested that rational-empirical strategies are appropriate to curriculum where the resource is well supported by expertise (researcher, inspector, specialist) to demonstrate its strength in a largely one-way communication flow. Teachers then adopt the innovation because of its logical value to them.

On the other hand, teachers or college lecturers may not adopt innovations based upon rational and logical grounds. A major problem is the assumption that there is but one form of logic and one reality for all teachers. This may not be the case always, this is because teachers have differing perceptions of reality and ascribe different meanings to events and subsequently different understandings of what is rational and logical. Consequently in the case of most curriculum innovations, some form of persuasion is employed to encourage teachers to adopt and implement curriculum innovations.

Normative-re-educative strategies

If a logical strategy proves ineffective in achieving planned change in an institution of learning then it would be important to try a strategy that would convince teachers that the planned change should be adopted. The underlying premise for normative-re-educative strategies is concerned with changing people, particularly their perceptions and attitudes, and hence their subsequent behaviour. The changing of behaviour may be viewed in two ways. First, from the perspective of a change agent who perceives substantial resistance from participants to the proposed change and who consequently seeks to ensure that behaviour is changed in the appropriate direction.

And second, from the viewpoint of a change agent who realizes that effective change will ensue when participants are re-educated as to the benefits of the proposed change. The essential differences between these approaches are the degree of perceived opposition and the consequential degree of persuasion needed to change participant behaviour. The former approach would argue for a more forceful persuasion than the latter approach which seeks to encourage participants to perceive the value through educative strategies. Of central importance to these strategies is knowing how clients ascertained their attitudes, values and perceived problems. Once this has been determined then people's attitudes, values and perceptions may be manipulated, to varying degrees, towards the particular innovation. Thus the central feature of normative re-educative strategies is to encourage through re-education, and even to manipulate, people to act in a manner differently from the current behaviour. Group work techniques such as group decision-making, workshops, training groups, symposiums and so forth are used as means of re-educating people to see things differently. To achieve this, persuasive communication of various forms are employed. Thus most forms of advertising, which emphasize a transformational approach to attitudes and values, may be considered as normative-re-educative strategies. The change agent in normative-re-educative strategies is usually an external force working with a group in a collaborative manner. Emphasis is placed upon encouraging clients to recognize, acknowledge and adopt the innovation. According to Bennis, Benne and Chin (1976), change in a pattern of practice or action, according to this view, will occur only as the persons involved are brought to change their normative orientation to old patterns and develop commitments to new ones. And changes in normative orientations involve change in attitudes, values, skills and

significant relationships, not just changes in knowledge, information or intellectual skills. There are times when we change our behaviour and it does not appear logical, rational or even in our best interest to do so. These strategies help explain how that phenomenon may have occurred or may be achieved in the future. No wonder these strategies are called normative –re-educative because they clearly recognize the centrality of beliefs, interests, perceptions and feelings and the re-education by the individuals that are involved, if the change process is to be effective (Smith and Lovat,1991:176). Examples of the normative-re-educative strategies in education include groups such as staff meetings, departmental meetings, in-service groups, working parties, consultants working with staff groups and so forth. Communication is essentially two-way and clients are usually cooperative, at least in group context. The persuasiveness of the message and the facilitator are also significant elements in explaining the effectiveness of these change strategies. Within the school or college curriculum many changes may have occurred as a result of normative-re-educative strategies. Perhaps a new programme has been introduced into a primary school or a gender equity approach adopted to secondary school subject selection. The genre approach to literature has been largely adopted through normative –re-educative strategies. Perhaps a College Principal may have used a normative-re-educative strategy to get his or her staff to introduce a new basic skills testing programme.

Power-coercive strategies are used in educational institutions if planned change fails to persuade participants to alter their behaviour. Sometimes the educational system may be aware of potential opposition and decides to take on a more ‘frontal’ approach to change

from the very beginning of the process. In such circumstances the answer to achieving effective change lies with the use of power-coercive strategies. This strategy is sometimes referred to as political-administrative strategies, for they are top-down in nature, this group of change procedures is based upon the control of rewards and punishments as a means of regulating the behaviour of participants. Power is used as the ultimate sanction, here participants are just given instructions or told to adopt an innovation and resistance is not tolerated or else sanctions are carried against those who try to resist change. If the planned change is not carried out, then the threat of a sanction is applied. Subsequently, the sanction may be applied in order to ensure compliance. This situation, however, invariably requires significant influence over subordinates by superordinates as well as the perception of a sanction threat held by the subordinate. Thus the essential feature of power-coercive strategies for curriculum change are; power to demand curriculum change and possessing the power to force, or appearing to force people to comply with the directed change. Ultimately, those in power or authority who are charged with the responsibility of implementing change decide to apply sanctions should it be necessary.

Using the power-coercive strategies, participants are forced to comply with imposed directions on the curriculum if they want rewards or wish to avoid sanctions. In both cases, particularly the latter, participants invariably do not relate meaningfully to the innovation and have little consequential intrinsic motivation to ensure the success of the innovation. Change agents using power-coercive strategies within an educational context are usually figures of authority such as Permanent Secretaries, Directors of Directorates

and other senior educational administrators. As such, these persons have the power to invoke sanctions and allocate rewards. More likely they would initially employ the threat of a sanction if the curriculum innovation concerned was not being implemented effectively. Consequently such curriculum changes are not well received by participants. And for many, when the threat of the sanction is lifted, the opportunity is perceived appropriate to revert to previous behaviour.

Power-coercive strategies are usually employed where change agents want a quick response either to achieve institutionalization of the innovation or if it is a particularly large and complicated innovation, to ensure it is well under way. Similarly, power-coercive strategies are usually for implementing technical changes to the curriculum, such as new assessment procedures, or a new syllabus document. Innovations that require substantial changes to teachers' perceptions, practices and beliefs are unlikely to be implemented effectively through the use of power-coercive strategies.

In educational institutions, power-coercive strategies are commonly employed to change the curriculum. Imposed curricula or procedures are also examples of situations where power-coercive strategies are employed. Specific instances of this form of curriculum change include the restructuring of curriculum in New South Wales through Excellence and Equity (1989), K10 Social Studies Syllabus (Western Australia), Blackburn Report (1985), Better Schools Western Australia (1987). In all these instances the change was directed by senior government officials or politicians using power to ensure compliance.

The approach to initiating major curriculum change by educational systems may be described as a process of cumulative change strategies. Frequently educational systems have sought to implement a curriculum change, which they initiated upon their perception of its importance, through the use of rational-empirical strategies in the first instance. Should these not work effectively, they are supplemented by normative-re-educative strategies that particularly revolve around in-servicing teachers. As a last measure, depending upon the level of significance attributed to the curriculum innovation, educational systems will employ power-coercive strategies. Generally speaking, educational systems are well aware of the need to have positive teacher support in order to enhance innovation acceptance. But there are times when the forces of the system, or pushing the system, demand the implementation of an innovation. In these situations educational systems may well resort to power coercive strategies as a last resort or even as the initial change strategy.

The problem of innovation is not a matter of supplying the appropriate technical information, but rather a matter of changing attitudes, skills, values and relationships. Havelock(1969) of the University of Michigan, did an extensive study of how innovation, whether in education, Science, Agriculture or Industry came about. He identified three main models of curriculum innovation and implementation which include the Research, Development and Diffusion Model (R, D and D); the Social Interaction Model(SI) and the Problem Solving Model(P-S).

The Research, Development and Diffusion Model (R, D and D) is where an idea or practice is conceived at the head or centre, for example, at a central planning unit or Curriculum Development Centre, and then fed into the system. This model is usually adopted in the first wave of curriculum development. The R, D and D model is effective where curriculum development has to be on a large scale, where ideas have to reach geographically dispersed and isolated users and where those who will be implementing the changes, for examples teachers are often lacking in knowledge and expertise. This is the situation in many developing countries hence the model has been used extensively in curriculum reform movements in these countries.

The Research, Development and Diffusion Approach is a highly organized, rational, approach to innovation, founded on the following logical sequence of activities in the evolution and application of an innovation.

Characteristics of the R, D and D approach is a development agency at the centre which produces packaged solutions for users at the periphery (schools and teachers). Hence this approach is also known as the 'centre-periphery' approach. It is typical of the situation in many developing countries, where, for example, a national curriculum development agency at the centre (Ministry of Education) develops curricular programmes for schools at the periphery. The advantage of a central agency, such as a national Curriculum Development Centre, is that it can harness the efforts of experts and talented teachers for the benefit of the whole system. Furthermore, such a system can ensure that national priorities are given adequate emphasis.

A strong case can be made for such development centres as against leaving so vital a task to the whims and fancies of ad hoc committees. Moreover, curriculum development centres can take a leading role in the crucially important task of training and re-training of teachers for their new tasks. The R, D and D model has several advantages such as the following; the innovation developed is not some chance, ad hoc change, but is based on research and relevant data, and on the principles of curriculum development; the materials and prototypes, produced by specialists and experts, can be expected to be of high quality. These materials are tested before diffusion on a large scale. On the other hand, some of the disadvantages of the R, D and D model are the high initial development costs, though it is assumed that the high costs would be compensated by the resulting quality and efficiency in the long term. In this model teachers are involved in the development process only to a limited extent. Generally, teachers are passive recipients of materials developed for them by a central agency. Owing to the high degree of centralization, there is a danger of failing to take account of local needs and variations. This model of innovation is effective in the case of materials production, such as pupils' texts, teachers' guides, but it is not very appropriate to other types of innovations such as new strategies of teaching or learning.

The teacher should never be ignored in the process of curriculum change. No matter how carefully the pupils' work-cards and texts might be structured, what is learned is, in the long run, is the product of teacher-learner interaction. A variation of the 'centre-periphery model' is the 'proliferation of centres' model.

In this model the primary centre becomes a trainer of trainers, those being trained setting up their own centres in their regions or school districts, where they pass on the central message, the content, of the innovation to be diffused, the new methods, techniques, ideas to be adopted. The primary centre is thus able to concentrate on training or re-educating the change agents, on deployment, support, monitoring and general management.

The *Social-Interaction Model* (SI) is a strategy of curriculum innovation and implementation where change proceeds through contacts, formal and informal, among interested individuals or groups of people. The Social Interaction Model employs a different pattern of operation: awareness – interest – evaluation – trial – adoption. Social Interaction is usual way by which ideas and practices are diffused through society – by informal contacts between interested individuals and groups. This model emphasizes diffusion, the movement of messages from person to person and system to system. It stresses the importance of interpersonal networks of information, of opinion leadership, personal contact and social integration. The strategy usually takes the form of convincing a respected administrator or teacher of the usefulness of a new device or practice, and then enabling colleagues to come and see for themselves the new practitioner using the innovation. A great advantage of this model of innovation is that it is a ‘natural’ process. One of the disadvantages is that it involves individuals rather than groups or organizations and it these latter that generally have to implement innovations. Also, the process, being informal and unplanned, can be slow. But such an unplanned approach can be made more systematic by structuring and coordinating the contacts between groups and individuals interested in curriculum development.

In the past this was done through courses and conferences, by visits to schools, by inspectors, and so on. Here the central agency acts merely as a coordinator or communicator of ideas, rather than being itself the generator of ideas. This model is also called a 'periphery-periphery' model. Ideas are generated at the periphery and communicated, via the centre, to other points on the periphery.

The *Problem-Solving Model* (P-S) is a strategy of curriculum innovation and implementation where individuals are themselves involved in conceiving, initiating and developing innovation at the local level. This model is based on the assumption that innovation is part of a problem –solving process which takes place inside the user or client system, be it a school, the teacher or even the student himself. Whereas in the R, D and D model the innovative initiative comes from the 'centre,' in this problem-solving model the initiative comes from the periphery – the school/client. Innovators at the periphery set about solving their own problems. Unlike the R, D and D model, innovations are not specified in advance but arise from the needs of the clients/schools. The problem-solving model is built round the user of the innovation. It assumes the user has a definite need and that innovation satisfies that need. Thus the process is from problem to diagnosis of a need then to trial. Among the advantages of the Problem-Solving Model are: adoption. Emphasis is on client-centred collaboration rather than on manipulation from without. The following steps are characteristics of the P-S model. A need is identified; this need is translated into a problem which is then diagnosed; this diagnosis leads to a search for solutions; the possible solutions are evaluated. The innovations which seems to provide the best solution is then tested for its effectiveness.

One might call this periphery-centre approach to innovation. The innovations are initiated, generated and applied by the teachers and schools themselves on the basis of their needs. Such innovation will have strong user commitment and the best chance for long-term survival. Whereas in the R, D and D and the S-I model, the receiver (the teacher) is generally a passive figure in the innovation process, in the P-S model he is actively involved in finding an innovation to solve his own unique problem.

The Problem-Solving Model is flexible enough to encompass all types of innovations such as materials, methods and groupings of pupils. The chosen innovation is geared to the particular circumstances of the school/client. Some of the disadvantages of the Problem-Solving Model are that being local and limited in size, the quality of the innovation in the way of materials, for instance may not be as good as that which a large central curriculum development centre could provide. Though appropriate to the needs of the school, the particular innovation may not necessarily be based on sound theory or practice. Such innovations usually take up a considerable amount of the teachers' time.

The *Linkage Model* is the fourth model developed by Havelock in an attempt to overcome the weaknesses of the three models outlined above, yet drawing upon their strengths. The Linkage Model combines aspects of all three models by using linkage procedures and agencies intermediate between the centres of the curriculum change and the schools, which mediate and link together all the parties involved in the innovation process. These linkage agencies could be teachers' centres, colleges of education, universities, regional resource centres and others which provide linkage by giving support and advice, providing resources, such as curriculum materials from a central agency,

by running in-service courses, seminars, visits, by providing a service to trial schools after the main development team has withdrawn, by proposing innovations tried and tested elsewhere to users with similar or related problems.

Curriculum design becomes curriculum proper when it is adopted in the classroom. But there is often a mismatch between the ‘official’ curriculum and the ‘actual’ curriculum of the classroom. Comprehensive schools are established but they do not necessarily provide comprehensive education – they still stream their pupils by ability as did the ‘grammar’, and ‘technical’ schools they were designed to replace. The change is superficial, not fundamental.

Innovations cross the thresholds of schools, but their adoption is often short-lived. Eric Hoyle (1976) points out that “tissue – rejection” occurs, this is a situation where carefully developed materials gather dust in cupboards, the new ideas slowly lapse away, they fail to become a permanent and effectively functioning part of the school – they are institutionalized. Curriculum innovations are more easy to launch than to maintain and sustain. But unless they are maintained and sustained they become mere memories. So often, innovation lasts only as long as the outside funding (the soft money) does; as soon as the institution has to continue the innovation on its own local budget the innovation is discarded. Bishop (1985) notes that there are many reasons for the discrepancy between the intent of curriculum change and what actually happens in the classroom, between theory and the practice, between desire and actual achievement, between plan and execution.

Among the chief of these reasons is resistance to change springing from tradition. From the theoretical stand point changes in the curriculum are inevitable, but in practice, every positive innovation encounters the most vigorous opposition. Education is a realm of tradition, and resistance to change springs up in the most varied quarters, ranging from the teachers themselves, the administrators, the parents, the pupils and students, to political, professional, confessional and cultural circles. UNESCO (1980) notes that in some countries the socio-psychological resistance to reform is the major problem, perhaps even more stubborn than the financial problem itself. The task of curriculum innovation and implementation involves changing the attitudes of people. Parents as elsewhere in the world are more concerned with their children's success in examination. They are more likely to be suspicious of change, particularly when it involves their children spending time in scientific experiments, making things, drawing, visiting and so forth all of which in their view takes up time for getting ready with examinations.

Change begins in the minds of people. An innovation that is at odds with existing values and practices will certainly encounter initial difficulties. In a society that demands unquestioning respect and obedience to elders, where their word is to be accepted without query, it would be difficult to introduce methods of teaching and learning that positively encourage questioning and thinking for oneself.

Summary

This Chapter discussed the concept of curriculum change and innovation. Sometimes these concepts are used interchangeably especially by lay persons. An innovation is clearly more planned, deliberate, routinised and willed than change, which tends to be spontaneous. Regarded as a process with a clear purpose, innovation brings us into the realm of social technology; it is concerned with devising the most effective combination of means to produce specifically conceived ends.

An innovation must not only last but also have a high rate of utilization, and that it should resemble its intended and planned form. Thus, an innovation is an improvement which is measurable, and is the result of deliberate choice and development, is durable and unlikely to occur frequently (Miles, 1987).

Change is a generic term used in education to incorporate a number of associated concepts (innovation and adoption) in order to analyse and explain curricula phenomenon. Change is the process of transformation of phenomena and in analyzing that transformation it is useful to consider the dimensions of rate (speed), scale (size), degree (thoroughness), significance (profoundness) and direction (orientation). It usually refers to a general concept which describes what has happened, particularly as the result of the dissemination of an innovation. The chapter has also outlined models and strategies of curriculum innovations.

CHAPTER THREE

LITERATURE REVIEW

Overview

The literature surveyed on curriculum innovation and change in primary teacher education is divided into three parts. The first part reviews teacher education before independence and after independence. The second part looks at global trends in teacher education while the third part discusses the general approaches and pedagogy of teacher education in selected countries around the world. The Chapter ends with a discussion on six dilemmas in teacher education followed by a summary.

Teacher Training Before Independence

What is Zambia today was, until independence in October 1964, known as Northern Rhodesia. The history of education in Zambia is largely similar to that of other ex-British dependencies on the African continent. Most of the schools were established and run by Christian missionaries, whose primary purpose was to teach Africans to read and write for evangelization purposes. The initial educational efforts of the missionaries were later buttressed by colonial rulers and white traders who needed Africans to serve in junior positions in their establishments. At the same time, alongside schools for Africans, were separate schools for European children, and children of mixed races (coloureds), including Asians. Racially segregated schools were a cornerstone of British educational policy in Zambia, as was the case elsewhere in British dependencies in Africa.

In line with British policy elsewhere, the education provided was meagre both in quality and quantity. The dominant mode of pedagogy was rote learning, rather than discovery learning, which could have fostered creativity. Moreover, heavy emphasis was placed upon primary school education. This was consistent with British colonial policy of allocating Africans exclusively to subordinate positions within the colonial social structure. It has been said that of all the British dependencies in Africa, Northern Rhodesia (now Zambia) was one of the least developed in terms of educational facilities during the colonial period (Achola, 1990).

The neglect of African education in Northern Rhodesia was documented by the Economic Survey Mission on Economic Development in Zambia in 1963. The Economic Survey Mission, jointly sponsored by the United Nations, the Economic Commission for Africa, and the Food and Agricultural Organisation, could only find 4,420 Africans who had passed the two-year junior Secondary Course (Form II), and only some 961 Zambian Africans with full Cambridge School Certificates. It is not a lie, therefore, that when President Kenneth Kaunda of Zambia announced to the nation that at the time of independence on October 24, 1964, Zambia had only 100 university graduates (all of them educated outside the country), and only 1,500 with full Cambridge School Certificates, and that there were no more than 6000 indigenous citizens with at most two years of secondary education. These figures for 1964 make sad reading when seen against the fact that these educational targets had been met by Ghana in 1943, by Kenya and Tanzania in 1957 and 1960 respectively; and in 1963, Uganda alone had more than six times as many Secondary School Certificate holders as Zambia.

This meagre educational development for Africans set the tone of educational policy in Zambia after independence (Achola, 1990).

At independence, in October 1964, Zambia inherited a racially segregated educational system, meagre educational facilities and enrolments for Africans, and a heavily liberal arts biased educational curriculum. As such, the new political leadership, under the United National Independence Party (UNIP) saw as among its most important educational priorities, the elimination of racial segregation in schools: increased enrolments for Zambians at secondary and higher education levels with a view to creating a large pool of indigenous Zambians to run the institutions of their new political and social order; and the introduction of science-oriented curricula and professional subjects to train Zambians for technical and professional careers.

At the same time, the new political leadership had to deal with great disparities in primary school enrolments and facilities between the urban and rural areas, most primary schools had, during colonial days, provided up to only four years of education, as compared to six years in urban areas. A related problem at independence, was the need to reduce the heavy reliance on expatriate teachers, especially at the secondary school level. Infact, before independence in 1964, there was not even a single teacher training institution for secondary teachers in the country.

There were a myriad of other problems facing Zambian education in 1964, in addition to those mentioned above, poor and dilapidated rural primary school buildings, glaring low participation rates by girls in the educational system, few and poor teachers houses, etc.

The first teachers in Northern Rhodesia now Zambia were European missionaries, most of whom had no initial training in teaching. The missionaries were helped by African teacher evangelists who accompanied them from South Africa, Southern Rhodesia and Nyasaland where missionary work was established earlier than in Northern Rhodesia.

The missionaries and their teacher-evangelists were “everything”- preachers, teachers, doctors, agricultural experts, advisors and letter writers. They preached the gospel, taught lessons and worked in mission clinics. The strong desire to build many schools for the purpose of spreading the gospel made many missionary societies recruit more teachers to teach in the mushrooming village schools. In keeping with their philosophy of education where by “education was an essential element in evangelization and in nurturing their new teachers from among African converts “who could preach the word of God and teach others to read” (Snelson, 1974).

Early missionaries required conversion and christian character as the main qualification for their teachers, not academic and professional qualifications. It was the prerogative of the missionaries to choose who should teach in their schools mainly because of their character.

Therefore, most African teachers in mission schools were uncertified, and were in every way catechists or evangelists without any kind of teacher training (Mwanakatwe, 1968:21).

While teacher education has had its fads and frills, it is basically an unglamorous subject (Woodring, 1975). The oldest form of teacher education is the observation and emulation of a master. *Plato* learned to teach by sitting at the feet of Socrates. *Aristotle*, in turn, learned from Plato. Throughout history others have learned both how and what to teach from their own teachers. If teacher education is defined simply as the education of those who become teachers, its history is coterminous with the history of education itself. Advice to teachers and instruction in methods were available in written form long before there were special schools for teacher training. Roman teachers could read *Quintilian's* advice on teaching, sixteenth century teachers could learn from the writings of *Erasmus*, and seventeenth century teachers could read the *Didactica Magna* in which *Comenius* said his main object was "...to find a method of instruction by which teachers may teach less, but learners may learn more..." A form of teacher education was provided by medieval universities where the master's degree was a certificate of admission to the guild of professional teachers. It might be noted, too, that the word "doctor" meant scholar or teacher long before it came to mean physician (Woodring, 1975).

The concept of a teacher in the early days was not that of an educator, but of a soul winner who went into his own village taking with him barely nothing, apart from a Bible, his note book, a few books in his mother tongue and an English Grammar Book.

After lessons in school, he stood behind the pulpit preaching and exposing the evil ways of his own people. Academic qualifications of early teachers were mediocre and not different from their pupil's education. From among their pupils, missionaries chose converts who showed they could read and write better than the rest, and sent them to open new village schools.

The majority of early teachers rarely went beyond Sub B, and a few went up to Standard I or II in their education. However, by 1935, education standards for teachers had been raised to Standard IV before they could do teacher training. In 1963, one year before Northern Rhodesia attained independence, the academic qualifications for teachers had been raised to Standard IV for lower primary teachers, Standard VI for middle and upper primary teachers; two years of junior secondary education and an average pass in the Cambridge School Certificate for upper primary school teachers. A good pass in the Cambridge School Certificate and Higher School Certificate were required for junior secondary school teachers.

As already stated, the early years of educational development in Northern Rhodesia had no co-ordinated and proper training programmes. Teacher training was a responsibility of each missionary society, and was haphazardly done. Like the education standards of teachers, their professional training was mediocre. There were no proper training institutions mainly due to lack of funds among missionary societies, and partly due to their different doctrines and rivalries among themselves over spheres of influence. The latter made it difficult for them to put their limited resources together in order to establish

proper training institutions for their teachers. As early as 1918, the British South Africa Company had expressed concern about the critical shortage of trained teachers, and passed a legislation called the Native School Proclamation. It gave guidelines on the professional qualifications of teachers. It stated:

No person shall be a teacher in any school unless duly qualified, and no person shall be deemed to be qualified unless he produces to the administrator, such certificate of efficiency... as the administrator may by regulation prescribe (Snelson, 1974:130).

In 1921, another legislation was passed. It emphasized the need for the well trained missionary teachers to be in charge of their schools at the mission stations. In the same year, missionaries agreed at the second General Missionary Conference to pull together various missionary resources to establish schools for training of their teachers. At this conference, the part-time inspectors of schools, who had been appointed by the BSA Company, told the missionaries that such schools would be invaluable since the greatest obstacle to progress was the absence of qualified teachers (Snelson, 1974:130)

When the British Government took over the administration of the territory in 1924, there was an increased interest in the training of teachers. The 1925 Memorandum on Education Policy argued, among other things, that initial training of teachers should be followed by refresher courses, and that there should be visiting teachers who could bring some new ideas and refresher inspiration and encouragement to village teachers.

When Latham was appointed as Director of Native Education in 1925, one of his priorities was to improve the training of teachers. He argued:

The teacher must not only know the subjects which he has to teach, but he must be imbued with knowledge of teaching methods...Four years of boarding school under the required character forming influences after he has already mastered the mechanical business of reading and writing in the vernacular is the minimum of training required for turning out a teacher in anyway worthy of the name and little enough can be expected of this. It will, however, be a great advance on what prevails at present (Snelson, 1974).

Matching his words with action, Latham committed the few funds the government made available for African education towards the establishment and improvement of teacher training facilities in the territory. Since education for Africans was the responsibility of missionaries, the funds were to be given in the form of grant-in-aid to missionaries, whom he urged to stop mushrooming bush schools so that they could redirect their resources to the programme of training their teachers in an efficient manner.

The missionary societies' response to the department's plans to improve and increase training facilities was favourable. After 1926, a number of missionary societies started courses for teachers under the supervision of trained educationists. By 1931, there were eight normal schools, training male teachers besides offering middle primary education (Standards III and IV) to other pupils from among whom promising pupils would be selected for teacher training courses. In the same year, facilities for training female teachers were under preparation. In the years that followed, there was a steady improvement in the training of primary school teachers.

Latham's effort, and that of those who came after him, had considerable impact on the training of teachers and on the establishment of training facilities in the territory. While there were only two institutions worthy to be called teacher training in 1921, the number of teacher training schools rose to thirteen in 1949. These training schools offered two year teacher training course to Standard IV and Standard VI students.

By the eve of independence, both the academic and professional qualifications of African teachers in primary schools had improved tremendously. Secondary school teacher training, on the other hand, was very much neglected in the years before independence. Before 1963, facilities for training secondary school teachers for the African education system were non-available except for Chalimbana College which offered a three year course for junior secondary school teachers. Its enrolment of secondary school teachers in 1963 was only 26 men and 8 women. Most of the secondary school teachers were expatriates, trained outside Northern Rhodesia.

Teacher Training After Independence

Since independence, teacher training has become the responsibility of the government under the Ministry of Education. At the time of independence in 1964, there was a world-wide curriculum reform which originated from the United States of America and other developed nations. The attainment of independence in Zambia was followed by demands for changes in different institutions including education. Therefore, curriculum change was inevitable due to social, cultural, economic and political reasons. The first pre-

service teacher education course for primary school teachers was the Zambia Primary Course (ZPC) introduced in 1967. The ZPC was an experimental curriculum based on the New Peak Course, an English Medium Programme in use that time in Kenya (Chishimba, 1979). The New Peak Course, sometimes referred to as the New Primary Approach, embodied primary teaching methods such as learning through doing and group work, while using English as the medium of instruction.

The Zambia Primary Course (ZPC) was designed to offer a six-term course (two years). ZPC was aimed at preparing student teachers to teach all the primary school grades(Grade 1-7). Previously, primary school teachers were trained as either lower primary teachers or upper primary school teachers. This type of training posed a lot of problems in the deployment of teachers as teachers could not teach all the grades in the primary school.

The second curriculum review which affected primary teacher education was from 1975 to 1977. This was part of a more comprehensive educational reform exercise aimed at improving the content and methodologies of the curriculum in order to reflect the needs of the changing society. The education reforms of 1977 regarded teacher education as one of the vehicles for social and economic transformation of the newly independent Zambian society. The policy declared that the teacher was the key person in the entire educational system of a country. It was felt that the success of the educational reforms in Zambia depended on the commitment, competence and resourcefulness of teachers in the system(GRZ / MoE, 1977)

A careful reading of the Educational Reform: Proposals and Recommendations of 1977, makes it quite clear that the Reforms focused essentially on two issues: (a) the quantitative development of the formal education system and (b) the qualitative development of the education system, particularly in reference to teacher education and supply, evaluation and examinations, technical education and vocational training, continuing education, pre-school education, and the organization and management of the education system.

The Educational Reforms of 1977 acknowledged that teachers could not play their roles successfully from a position of mediocrity. It was argued that good teaching demands that the teacher should not only possess a correct attitude and adequate knowledge of the subjects taught but also keep abreast of developments in those subjects and in the objectives and methods of teaching. A teacher was also expected to have a deep understanding of the society in order to serve the communities effectively. In order to perform this role, teachers were required to develop themselves politically, academically and professionally. Thus, the second curriculum review resulted in the Zambia Basic Education Course (ZBEC), this curriculum review placed emphasis on Science, Mathematics, Technology, Political Education and Production Units in schools and colleges. Under ZBEC, English was still the medium of instruction from Grade I, although one of the seven official Zambian languages understood by the majority of the pupils in the class was used in special circumstances.

The teacher education curriculum under ZBEC and organization of training still remained traditional and stereotype. Each subject was developed discrete without any element of integration. During the 1990's, it was observed that the quality of education in the country had deteriorated. It was alleged that the curriculum was out-dated and was producing people who were unable to perform according to expectations. This was enunciated in the second education reform policy called *Focus on Learning*, which was launched in 1992. The policy was founded on the premise that completed primary education should help alleviate poverty, ignorance and advances economic and social development. In this policy, the purpose of primary teacher education was to transform Grade 12 school leavers into professionals who would be masters of the subject knowledge appropriate at primary level, competent in teaching skills and imbued with a sense of professional commitment to educating beginners and the young (GRZ/MoE, 1992). Teacher training colleges were expected to focus their training on transforming students into competent and committed teachers. In order to accomplish this task, teacher training institutions were required to have sufficient expertise and autonomy to direct their efforts in the production of high quality teachers. *Focus on Learning* adopted a rationalist approach to teacher education, it reduced or narrowed teaching to technical competencies which students would be able to promote at appropriate levels in schools. It also called for adequate resources and autonomy for teacher training institutions. This policy position can be appreciated against the background that at this period in the Zambian history, there was too much political control and centralization of the education system and the college infrastructure were run down and under resourced. The policy highlighted the role of adequate resources in ensuring quality teacher education.

When Zambia changed its political system and ideology, it embraced liberal democracy. Consequently, a new educational policy, *Educating Our Future* (1996) was formulated, built on the values of liberal democracy. The aim of education was expected to be guided by the principles of liberalization, decentralization, equality, equity, partnership and accountability. Just like the Educational Reforms of 1977, this policy adopted a reconstructionist approach to education. However, more emphasis was placed on skills and competencies that were regarded as crucial in contemporary education.

On teacher education, *Educating Our Future* is concerned with the essential competencies required in every teacher such as the mastery of material to be taught and skill in communicating material to the pupils (GRZ/ MoE, 1996). In order to prepare and train teachers, the curriculum in pre-service primary colleges of education was not confined to what was taught in the lower and middle basic classrooms, the training made provision for the personal education and growth of the students (GRZ/MoE, 1996).

Educating Our Future established a radical departure in the way the curriculum was arranged at the lower and middle basic. The curriculum was not fragmented into rigid subject defined compartments because the child at this stage did not require the analytic capability of separating the world of experience.

Educating Our Future lays emphasis on the skills and knowledge that are central to the productivity of the economy and that help in the establishment of a liberal economy, in which internal and external competition are central values.

Following the 1996 National Educational Policy (*Educating Our Future*), the Ministry of Education took steps in reviewing and restructuring the teacher training curriculum. In 1997, the Teacher Training Inspectorate Unit of the Ministry of Education designed a programme called Field Based Teacher Training Approach (FIBATTA). This programme was intended to address the problem of shortage of qualified teachers. FIBATTA was premised on the competence-based curriculum aimed at developing, broadening and deepening the pedagogical and professional competencies of the trainees through active methods of study. FIBATTA was short lived and was discontinued hardly three months of trial in all teacher training colleges. The purpose of this programme was to design and implement a new basic teacher education curriculum that would reflect accurately the current needs of Zambia. ZATERP ran successfully for three years. Based on the experiences from the pilot, the programme was taken to scale at all the ten teacher training colleges from January 2000. At the time of writing of this thesis, this curriculum was known as the Zambia Teacher Education Course (ZATEC). ZATEC was delivered through a two year course; the year based in the colleges was referred to as the college-based year. In the second year students were attached to schools for teaching practice. This was referred to as the school based year. During the school based year students continued their studies alongside their teaching practice.

ZATEC was based on learner-centred education. It focused on the need for change in the form and nature of teacher education for basic schools. It recognized the three stages. i.e. lower, middle and upper within the basic education phase. The focus of ZATEC was on the lower and middle stages. However, the flexibility in the structure of the course made it possible to extend it to cover the entire basic education phase. It was based on the principle of integration of the traditional subjects rather than their differentiation. Unlike ZPC and ZBEC, ZATEC adopted a concept of study areas in which the subjects were grouped according to clearly definable relationships among them.

Teacher Education: An International Review.

Reimers (2003) notes that the professional development of teacher educators is an aspect of professional development that has been neglected, despite many reports that show its importance in the improvement of the professional development of all teachers (Beaty, 1998 and Clark, 2000) In fact, research involving teacher-educators is scarce, especially concerning practicum advisers who work with student-teachers in school settings. Reimer argues that the professional development of teacher-educators and other educators in higher education institutions does not differ greatly from that of elementary and high school teachers. They need to acquire professional knowledge not only of subject matter, but also of pedagogy (and it is the latter which is usually weak among higher-education teachers);they must develop skills and techniques for teaching(something that cannot be “taught” directly, but that can be promoted and developed with guided practice (Alvarez,1999). They must develop attitudes and understanding of ethical principles that underlie teaching (Beaty, 1998).

Hernandez (1998) lists a few principles that should guide the education of teacher educators as follows:

- The work of teacher-educators must include not only teaching, but also research directly related to their area of expertise.
- Processes to prepare teacher-educators must be based on practical issues related to the day-to-day work in the classroom.
- As the work of teacher –educators has a strong influence on the work of teachers, they should model and illustrate a variety of teaching methods, techniques, and processes; therefore, they need to be educated in pedagogy.
- Teacher-educators must know the national education system in depth, and must understand the context in which it is implemented.
- Teacher-educators must know and understand the institutions where they work and where their students will work.
- Teacher-educators must enjoy teaching. This disposition will generate a positive attitude towards teaching in their students.

The first step in any process of developing a professional in any field is the initial professional preparation of that person. In teaching, this preparation takes very different shapes and forms and varies dramatically from country to country. Yet it is agreed that learning to teach is personal (as it depends on the students' personal learning history, their pre-conceptions and beliefs about learning and teaching, (because of the variety of skills and competencies that have to be learned) and context-specific (Hague,2000).

As described previously, different conceptual orientations about the role of teachers and their preparation have shaped the nature of the initial preparation of teachers. Calderhead and Shorrock (1977), for example, describe the following orientations.

- **Academic orientation**-emphasizes teachers' subject expertise and sees the quality of the teachers' own education as their professional strength. In this orientation, a solid liberal arts education is the key factor.
- **The practical orientation**-emphasizes the artistry and classroom technique of the teacher. The key ingredient in this orientation is the practical experiences in the classroom, and the apprenticeship model of preparation.
- **The personal orientation**- emphasizes the importance of interpersonal relationships in the classroom and considers learning to teach as a process of becoming inspired in the humanistic approach to psychology (represented by Carl Rogers). The key element in teaching preparation is, therefore, experimentation and discovery of personal strengths.
- **The critical inquiry orientation**-views schooling as a process of social reform, and the role of schools as promoting democratic values and reducing social inequities. A key element of this perspective is to promote the development of critical and reflective practices in teachers so that they can become agents of social change.

These orientations are not necessarily mutually exclusive. However, depending on the culture and values of a particular society, the historical time, and the society's perception of teachers and teaching, whichever orientation is decided upon will have a great effect on which type of education and professional development opportunities are available to teachers.

Pre-service Teacher Education

Pre-service teacher education varies dramatically around the world in such aspects as institutional context, content areas, time allocation and forms of practical experiences for the students (Ben-Peretz, 1995). It also varies in how societies perceive its purpose. Although many societies consider this preparation to be the only professional preparation teachers will receive throughout their careers, the current tendency is to acknowledge that this is merely the first step in a longer process of professional development. During initial training and their first few years in the classroom many teachers experience difficulties in learning to teach (Calderhead and Shorrock, 1978) and thus most educators are advocating for more support to expand the conception of teacher preparation and professional development, which does not necessarily imply more years of pre-service or initial education.

Models of Pre-service Education

Calderhead and Shorrock (1997) present the following three models of early professional development found in different countries around the world. Each model places a different emphasis on specific aspects of learning how to teach and is based on a variety of different approaches to the learning process.

The enculturation, or socialization into the professional culture model - emphasizes the socializing processes in professional development. Teaching is perceived as a demanding task that takes place in a material and ideological context. The organization, physical resources of schools, and values embedded in institutional practices exert a powerful influence on the teachers, and may often override the practices acquired in the institutions of teacher preparation. This is, in fact, a complex model, as schools generally have multiple ideologies. Research has found that the pressures experienced by first-time teachers when trying to integrate a new school usually explain how they can, in a manner of speaking, abandon what they learned in their initial preparation as teachers or their own exploration of their personal teaching style.

The technical, or knowledge and skills model - emphasizes the knowledge and skills teachers need to acquire in order to contribute to classroom practice. In the 1960's and 1970's, the model focused on classroom behaviour, for example, micro teaching, questioning techniques or behaviour control during times of transition. More recently, an effort has been made to conceptualise these skills, not only in terms of behavioural practices, but also in terms of thinking processes. In addition, this model also focuses on pedagogical content knowledge; that is, the kind of knowledge that expert teachers usually have and which novice teachers need to acquire. This includes knowledge of children, teaching strategies, curricula, school rules, the availability of materials, subject matter, how to facilitate understanding in others etc.

Teaching as a moral endeavour model -This focuses on a method of teaching which involves caring for young children, taking into consideration their interests, preparing them to be part of a future society, and influencing the way in which they live and relate to each other. It has been claimed that this constitutes an important aspect of teaching, which is highly valued by teachers, parents and children, but is usually ignored in discussions on the professional development of teachers. According to Hargreaves (1995), it is the moral dimension of teaching that makes this profession unique.

After reviewing the teacher preparation programmes existing in most Western European countries, Vonk (1995) concludes that there are two models: One is teacher professionalism, which is based on the principles of mastering the academic or subject knowledge and professional competence. In this model, teacher education provides future teachers with instructional skills and knowledge of pupil's learning processes and of child development (Vonk, 1995).

Length of Initial Preparation Programmes

Despite variability, the world-wide trend especially in Western Europe seems to require a minimum of a Bachelor's degree for entry into teacher preparation programmes (Cobb, 1999).

Many proposals to enhance teacher's professional development focus on extending the duration of initial education. For example, the US National Commission on Teaching and America's future proposed an additional year of professional schooling.

This kind of recommendation should be assessed critically, given that in many cases the need lies in restructuring the initial education rather than in extending the duration of a somewhat ineffective preparation programme. In addition, given the constraints to attracting sufficient number of qualified candidates to the profession, providing longer initial education may further discourage candidates and increase the shortage of teachers, a problem which most countries in the world are facing today.

Content of Initial Teacher Preparation Programmes

In terms of the content of teacher preparation programmes, different countries emphasize different components in the curriculum or the amount of time devoted to each one. But in general, most include courses and experiences that address subject matter, the foundation of education courses, professional studies (such as pedagogy and method courses), child development and practicum (Ben-Peretz, 1995; Cobb, 1999).

In the literature, the debate over whether to emphasize content or pedagogy is clear and abundant. The tendency in most countries in the 1990's is to emphasize the teaching of content in the initial preparation and the pedagogy in the practicum and in the induction programmes for new teachers, as well as in other professional development opportunities. Until recently, however, the issue of content was not addressed by the majority of professional development experiences, as most focused exclusively or primarily on the format, structure and organizational arrangements of education and teaching (Baker, 1999).

This tendency to focus more on content can be seen, for example, in the new emphasis that professional organizations in different disciplines and professional studies departments in universities are placing on joining efforts with schools of education and teacher-preparation institutions in the preparation of both new and experienced teachers.

At the same time, many countries still focus on content without pedagogy. For example in Ethiopia, as in many other African and Latin American countries, most of the teacher preparation institutions including universities and colleges which offer a certification programme do not offer to undergraduates the opportunity to experience a period of classroom teaching under supervision. (If they do, this period is very short). Bekalo and Welford(1999) focused specifically on the preparation of science teachers in Africa and report that few opportunities for practical work are offered in their pre-service preparation. As a result, once these are hired in schools to teach, science is taught in lecture format with little emphasis on the practical applications of such knowledge.

Another trend observed around the world is to increase the amount of time that pre-service teachers spend on practicum sites. Pre-service programmes that provide opportunities for supervised practice teaching throughout the duration of the course are the most effective. The length of this practical experience varies quite dramatically in different countries throughout the world. For example, Cobb (1999) reports that among the 18 APEC countries (Asian Pacific Economic Co operative Organisation), student teachers may be in practicum for as little as two weeks (e.g. in Japan for secondary school students-teachers) or four weeks (Japan and New Zealand) for elementary-school

student teachers for as much as a full year (e.g. Belgium, France, Germany and Chinese Taipei).

The trend on an international level is to increase the amount of time spent in the classroom in a formal professional practicum. This would be, in most cases during the initial preparation. In some countries where the practicum is short, teachers are required to have extensive in-service opportunity to practice under strict supervision. Such is the case of Japan, for example, where beginning teachers must complete 90 days of in-service training where practical skills are improved; continue with professional development on an ongoing basis, and also undergo intense training after 5, 10 and 20 years of service (Hawley and Hawley, 1997). Studies assessing the effectiveness of the teaching practicum have concluded that an increase in the number of hours a student – teacher spends in the classroom is very beneficial.

Challenges and Limitations of Initial Teacher Preparation Programmes

Regardless of the length of a programme or the level of preparation, pre-service teacher education has received strong criticism everywhere. For example, in a review of the literature, Villegas-Reimers (1998) presents a list of problems that exist in teacher preparation in Latin America. Among these problems she includes: the less than-ideal characteristics of most candidates who enter the profession; curricula of poor quality; too much emphasis on theory and little or none on practice; programmes that are too short; a weak relationship between programmes and school practices; the poor preparation of teacher educators; and lack of attractive characteristics of the teaching profession

(such as low status and low salaries), which in turn affects who enters the profession, who stays and for how long.

Programmes in other parts of the world receive similar criticism. In Pakistan the quality of teacher-training programmes is low. Students and faculties are lacking motivation, the facilities are in disrepair, and there is an overall lack of leadership (Warwick and Reimers, 1995). In India, pre-service programmes are generally of one year's duration and do not adequately prepare teachers for classroom responsibilities. Most individuals leave these institutions lacking in basic knowledge of subject matter, are deficient in pedagogical training and ill-equipped to work in schools and communities (Sharma, 1992) The same findings are reported for with regard to Brazillian teachers (Marcondes, 1999)

These criticisms are also found in developed countries, e.g. in the USA, Goodland (1990) identified the following problems concerning teacher preparation in a majority of the institutions throughout the country: education courses are taught by adjunct faculty, as the education faculty distance themselves from teacher education; teacher education programmes and curricula are set by external agencies, thus not allowing any autonomy; programmes have little coherence; teacher-preparation universities and colleges have weak relations with schools and co operating teachers in the field. He also mentions that there is little socialization of students into the teaching profession, its professional-ethical ideals, and the moral issues that teachers usually face in their jobs.

This long list of problems, in a way, explains why it is believed that in-service teacher preparation does little in terms of improving education and the professional development of teachers, and why there is a call for change in teacher education.

Case Studies of Curriculum Reforms in Teacher Education in Selected Countries.

The following case studies were selected on the availability of data and their relevance to the present study.

Bostwana

Bostwana has undertaken three curriculum reforms since its independence in 1966. The British school curriculum which Bostwana inherited had to be changed from 1966 to 1972 in order to adapt it to local needs. The primary school curriculum was improved upon in order to provide pupils with the required skills for the purpose of achieving a socio-economic revolution which the country was going through. At the teacher training level, the aim was to upgrade the competence of primary teachers in methods of teaching and in strategies of organizing and administering schools. The government of Bostwana appointed the National Commission on Education in 1976 to look into the quality and relevance of the primary curriculum.

The philosophical orientation of the basic school curriculum in Bostwana is that of giving it a practical orientation and vocationalizing it in an introductory fashion. This was a change from a purely academic curriculum which existed in 1976 before the curriculum was reviewed in 1992. The 1976 curriculum was examination oriented, it prepared pupils at each education level for major examinations at standard 7 and form 3 (Standard 10).

This created strong pressures towards memorization of facts in preparation for the examinations rather than strengthening the basic skills in pupils and developing their ability to think and reason and apply their knowledge and skills in their daily life.

In 1977 the MoE provided the primary curriculum with a practical orientation without vocationalizing it. Subsequently in 1994, the Basic school curriculum was geared to effective preparation of pupils for life, citizenship and work. The educational programme was to develop in the pupils moral and social values, cultural identity and self esteem, good citizenship and desirable work ethics. All these curricular decisions were made by a centralized Curriculum Development Division of the MoE.

At primary teacher training level, in order to be in line with the diversified primary curriculum, teacher training programmes were to be improved. The policy document recommended raising the entry qualifications for primary teacher training to Cambridge Overseas School Certificate “O” Level and upgrading the teacher training programmes to three years.

In order to address the issues of curriculum reform, the MoE set up a Curriculum Development and Testing Department to revise the curriculum and include in it practical subjects, to prepare instructional materials and to change the examination system to incorporate continuous assessment also as an assessment procedure. All these activities involved stakeholders from the education, industrial and community sectors.

Malawi

The first curriculum reform of 1964 in Malawi was intended to create in the pupils a sense of national identity and unity and to reorient education to economic development and keeping the cultural heritage of the country. The second one of 1982 targeted changes in education content and examination procedures. The 1985-1995 Education Development Plan gave the MoE and culture the mandate to review the primary school curriculum. The MoE had to ensure that the curriculum corresponded to the aims for education delineated in the plan. By December 1987, the MoE decided to launch the third curriculum reform. Substantial changes were made to the primary school curriculum as a whole at policy level in a curriculum strategy formulation workshop.

By December 1987, the MoE decided to launch the third curriculum reform. The philosophical basis of the new primary school curriculum in Malawi indicates a shift from a preoccupation with examinations and the acquisition of knowledge only to an emphasis on survival skills and the application of knowledge to life situations obtaining in the community. Primary education is conceptualized as a community oriented activity whose content, methods of teaching and learning experiences are derived from the local environment. It is now connected with work, culture and the learner's own situation so that the learner can apply knowledge and skills to his or her daily living.

The revised primary school curriculum is child-centred, activity based, problem solving and community oriented. In primary teacher training, there is stress on training for improvisation, effective utilization of local materials and the wider environment in

instruction thereby relating primary education to the community. The methods of teaching maximize the use of the local environment as a laboratory for enquiry and problem solving. Teachers and pupils use participatory approaches in order to produce better outputs of whatever tasks they are doing.

Uganda

In the post-independence Uganda, there have been four curriculum reforms so far: the first in the years 1963 to 1965, the second in 1967, the third in 1989 and the fourth in the years 1992 to date.

The reforms started with a qualitative general impression among the Ugandan people that education delivery in the country was unsatisfactory on two grounds mainly relevance and affordability. The general impression was that the primary education given to the young Ugandans was of a wrong type in that it focused exclusively on preparing them for secondary entrance examinations, ignoring practical aspects of knowledge and skills essential for life in their own community.

The reform process involved consultations with a wide spectrum of stakeholders through the education review commission. Second, relevance to real life needs was the key criterion used to decide on the content of the curriculum. Third, overloading the curriculum was avoided by integrating some subjects into one, and also by using certain subjects as carriers in the teaching of important themes such as HIV/AIDS. Fourth, an attempt was made to integrate schools into the community through the community

service scheme. Fifth, measures were taken to prepare teachers for the reforms: teacher training syllabuses were revised, serving teachers were to be re-oriented through workshops, and a scheme was devised to train untrained teachers without their having to leave their stations.

Lesotho

Lesotho, faced with shortage of professionally trained primary school teachers, introduced a training programme involving under-qualified primary school teachers through correspondence studies, tutorial visits and short residential courses (Taylor,1981). Students were visited at least once in a term by college tutors from the National Training College. This training programme according to Taylor (1981) attempted to provide professional training as well as academic upgrading and the qualifications earned were professional certificates rather than general secondary education certificates on face to face teaching in tutorials and short courses and less emphasis on group study, in which participating teachers came together for discussion with each other and for mutual support.

Namibia

Namibia education reform in teacher education has been necessitated by a shift in the beliefs and philosophy underpinning the education system. Some of the methods of teacher development that support education reform that have been tried out in Namibia is premised on learner-centred education. It is believed that teachers can be better when they cultivate a thoughtful, problem solving disposition towards their teaching. Curriculum reforms in teacher education in Namibia is based on the belief that until teachers are themselves reformed, educational practice in the classroom is unlikely to

improve a great deal (Cook, 1993). Reflection is believed by many modern-day experts in education to be a genuine way of fostering change in teachers. As John Dewey in Cook (1993) stated that “experience plus reflection equals growth.” Reflection is a foundation aspect of how a teacher becomes effective. In the literature there are many labels for teacher reflection including: ‘reflective thought’, ‘instructional decision making’, ‘wisdom’, ‘critical thought’, ‘educational beliefs’, ‘views of self as teacher and perceptions of teaching’ (Cook,1993). These names suggest different ways that teachers may improve themselves, but they essentially mean reflection. Reflection was introduced into education by John Dewey. He criticized education as “fad driven” but were not learning “why they did things”, or how to learn to improve from their own experience.

Teacher education according to Dewey looks back on teaching, calling some aspect of it into question, analyzing it, evaluating it and making plans for improvement. All teachers engage in some form of this activity, but too often it is participated in insufficiently. Dewey contends that quality educators and education cannot be derived from the imitation of techniques that have worked in the past, but rather teachers should be trained in analyzing and defining principles behind the techniques. In short, it is theorized that the more teacher reflectivity occurs, the better the quality of teaching. Unreflective teachers tend to accept everyday reality, working only to find the means to carry out most effectively the ends demanded by their culture, which leads to further enslavement for it leaves the person at the mercy of appetite, sense and circumstance. Dewey further argues that reflective teachers look at the other possible realities and might not want to do all things that the everyday reality of their school might seem to call for. Dewey specifies

three attitudes that are prerequisite for reflective action: open-mindedness, responsibility and whole-heartedness (Bloody, 1992). Open-mindedness refers to wanting to listen to more than just one side. It refers to wanting actively to seek out or create and consider alternative possibilities, and to be open to the possibility that anything we believe may be false, no matter how dear it is to us. Responsibility requires careful attention to and consideration of the consequences to which an action leads. It requires extended concern and not just immediate reaction. It means going beyond dependence on a formal description of the situation to investigation of its actuality. Whole-heartedness means that the previous two attitudes must be part of the person's life-consistently active –and not just put on when convenient or for special occasions. This is especially important, as Grant and Zeichner (1984) point out, because of the powerful socializing effect generated by a pre-service programme and by a school culture.

The Namibian teacher education curriculum emphasizes on the need to improve teacher reflection as part of a learner-centred approach to teaching. Reflection is an important way to help teachers improve their teaching. There are important traits and dispositions that need to be fostered and many specific methods for encouraging reflection. Reflection is looking back on teaching to detect patterns that are responsive or unresponsive to the learner, and that may be effective or not effective in helping the learner to learn. There is a strong moral component to reflection. When teachers pay attention to the moral demand they feel from the learner, they are motivated to improve. Too strong a focus on specific methods, even if they are called “learner-centred,” can cause harm if they are not

responsive to the child in the immediate situation. The essence of learner-centredness is in the relationship between the teacher and the child more than it is a specific method.

Tanzania

In 1974, a resolution was passed whereby universal primary education (UPE) was to be realized in Tanzania by 1980 (Dove, 1982). But, as in the case of Zambia, primary teacher output from existing conventional colleges, do not meet demand. Therefore, a new type of training was introduced in 1975. This programme aimed at meeting primary teacher shortage in the rural areas. The course lasted for three years on-the-job. Trainees were taught through radio and distance courses, and face to face contact with local inspectors, itinerant teacher trainers and village tutors, most of whom were ex-teachers. Training colleges also ran short residential courses.

In terms of quantity, this scheme seemed to have achieved its targets even though its qualitative aspects are not yet known because the programme was not evaluated. However, this scheme is an example of a field based programme, manageable only through coordinated team-work at local levels (Dove, 1982).

Nigeria

In Nigeria a mobile tutors in school-based training programme started in 1969 under the Nigerian Primary Education Improvement Project (Dove, 1982). This programme aimed at implementing a new curriculum in the Northern States. According to Dove (1982), this was an in service programme giving close support and guidance to teachers in devising classroom materials and teaching in the new curriculum. Mobile teacher trainers, based

on teachers' colleges which acted as centres for the project, worked mainly in the sixty-six project schools. There they helped teachers individually and in groups to apply the lessons they learned in courses especially arranged to help them cope with the new materials. The mobile teacher trainers themselves were guided by the Institute of Education, Ahmadu Bello University, Zaira, in a series of courses and workshops. This project showed how far centralized initiative can be modified to suit local conditions and an example of how the university, the Ministry of Education and international agencies can co-operate in alternative methods of training teachers.

Ukeje (1995) noted that the teacher education institutions in Nigeria were producing teachers who were incongruous with the goals of the system. He added that the institutions were not producing motivated, talented and efficient classroom teachers. This is because, the teachers in the training institutions were not well motivated themselves. The kinds of training that are given to the teachers by the institutions do not endow them with the spirit of enquiring and creativity. Many of them lack self confidence and pride hence are shy to identify with their training institutions. In the universities, some student teachers prefer to identify with the servicing departments, providing instructions in the teaching subjects, outside the faculties of education. It has been observed that teacher education have not made enough provisions for re-training exercise. Common feature of teacher education is that, teachers who are already in practice are not re-trained save for those aspiring to acquire additional qualifications. In other type of education, professionals have opportunities of re-training through mandatory seminars, workshops

and conferences. Based on what one observes, it can be hypothesized that the policy which specifies that teachers shall be professionally trained is the most unrealized.

A good professional education hinges extensively on the content and implementation of its training programmes; the curriculum. Ukeje (1995) notes that beginning with the pre-degree programmes in education, the content of the curriculum are not usually well organized. A reasonable percentage of those who undergo the pre-degree programmes in education are the ones who failed to gain admission through the University Matriculation Examination (UME). Since such students were unsuccessful in the relevant UME subjects, the pre-degree programmes ought to re-emphasize the UME subjects. Instead, the students are meant to study introductory courses in education and the chosen teaching subjects. This practice leaves the students with the weak foundation exposed by the UME un-remedied. The students in the first degree and certificate courses in education study History, Philosophy, Sociology, and Psychology of Education among others. These courses are expected to build in the students the technicalities required of a professional teacher. Unfortunately, the output of the teacher education system is unable to apply knowledge in these areas in the discharge of their professional duties. In effect, they are unable to marry theory with practices.

Okeke (2007) complained of the Nigerian system of pedagogy which she described as rarely exposing learners to explore and make use of their initiative and develop latent talents. The teachers appear to lack the spirit of enquiring, creativity and methods for giving the learners the relevant exposure. This is because, the programme which

produced the teachers themselves made no provisions for, or did not emphasize that aspect of teaching. Okeke (2007) has noted that teacher education in Nigeria appears to lack instructions in reflective thinking and problem solving. Hence, teachers faced with problems such as non-availability of, or low instructional aids, do not know the alternatives in such circumstances. As Covenant University (2005) corroborated, graduates of universities in Nigeria do not appear to know what steps to take in life after several years of intensive study. Apparently, the programmes including that of teacher education have only taken the learners through the mills without skills, loaded him with knowledge without empowerment and have wearied him down with points instead of facts.

Closely linked with the curriculum content is implementation. It is observed that the curriculum of teacher education are not diligently implemented, partly due to time constraints and other extraneous factors. As N dofot (2005) noted, if the academic content of teacher education and the way they are implemented do not enable student-teachers see the relationship of the subject to the problem of the schools and the society, the curricula would continue to remain irrelevant and de-motivating to the student-teachers. In other words, for greater relevance of teacher education curricula method of implementation are important as the contents themselves.

In a desperate desire to cope with the demand for teachers, teacher education is provided on non-regular basis (part-time and sandwich) programmes. As a result of the mode of operation of the programmes, questions are being raised particularly on the quality of teachers produced by them. On this, Egbegbedia (2005) warned that it does appear that

teacher education has engaged in professional self-destruction with its part-time and sandwich programmes. While the benefits of non-regular teacher education to the recipients, their employers and the institutions providing it is obvious, the inadequacies associated with the practice is indeed damaging. Some of the identified inadequacies in the programmes are; its “mushrooming” nature, insufficient time allocated in the time table; disagreement over programme/course duration among the institutions; certificate-centred nature rather than knowledge, skill and competencies acquisition; admission of unqualified persons; award of unmerited grades and absence of or inadequate monitoring by internal and external authorities.

Futhermore, Egbegbedia (2005) expressed surprises over the way revenue generation interest has taken precedence over the noble objectives of teacher education in the various institutions operating the non-regular programmers. He warned that if the situation is left unchecked, teachers that are trained in this unpatriotic and unprofessional ways might turn the bulk of teachers in the 21st century into mere cheaters.

Zimbabwe

Gatawa (1998) has noted that curriculum development in Zimbabwe is a patch work of disjointed initiatives, a series of impulsive decisions without a central organizing purpose. According to Gatawa, innovations in Zimbabwe appear hasty and ill-conceived with no basis in research. The so-called changes in the curriculum are largely cosmetic, dictated by political rhetoric and without a serious philosophical foundation. They are no more than a thin veneer giving a semblance of change without substantially altering the

pre-independence imported and bookish curricula. Gatawa (1998) argues that the reason for this state of affairs is not only lack of deliberate planning. It is partly explained by the fact that management positions are held by the same political cadres who admired and served pre-independence systems faithfully and who have no commitment to the new dispensation. In the final analysis, what one sees is a democratization of access to the same old, largely irrelevant curricula which have no obvious links with the socio-economic imperatives of the country. Gatawa (1998) contends that elaborate educational systems are imposed on weak national economies without pausing to consider the capacity of the country to shoulder the consequent recurrent financial overheads. Donor funds are indiscriminately allowed to go into unplanned capital expansion which the countries cannot afford to service. This happens because of an absence of a central clearing-house for projects and because educational decisions are frequently made without reference to national planning units.

In primary teacher education, the demand for primary teachers increased as enrolment figures swelled. Well over half of the teachers at this level were untrained. The annual teacher output from existing colleges only matched the rate of attrition and not expansion in the system. The percentage of untrained teachers remained unchanged. The situation was destined to worsen as Zimbabwe moved towards improved teacher-pupil ratios. To meet this challenge, a group of teacher educators was assembled in 1980 and came up with the Zimbabwe Integrated Teacher Education Course (ZINTEC) to train primary school teachers at a rate which would match the pace of expansion at the primary school level. The programme was launched in January, 1981 using a combination of distance

and face-to-face teaching in order to train primary school teachers on the job. The ZINTEC programme was deliberately organized around distance education techniques in order to provide an immediate solution to the problem of teacher shortage in primary schools. It was therefore a radical departure from the three-year full-time course structure of existing colleges of education. The developmental objectives of the ZINTEC programme was to overcome the existing shortage of teachers in primary schools; to meet the needs of a democratized society where education had become a right for everybody and not a privilege for a few; to support the creation of an education system that would meet the development needs of Zimbabwe through integrating theory and practice.

The Netherlands

In the Netherlands, the national curriculum for primary education which specifies the subject areas and time allocation is outlined in the Primary Education Act of 1985. By the power vested in him or her in the Education Act of 1919, the Minister of Education is required to consult the Educational Council on, among other educational issues, the national curriculum. The Minister also makes consultations with the consultative Committee for Primary and Secondary Education which comprises college and university lecturers, education officers, head teachers, teachers, parents and students.

The Ministry of Education, Culture and Science requests the National Institute for Curriculum Development, which was established in 1975, to develop curricular guidelines for primary and junior secondary education whenever need arises. The National Institute for Curriculum Development is funded by the government, via the Ministry of Education, to provide professional advice on, and support for, curriculum

development and implementation. In carrying out its tasks, the Institute takes into account the developments in the society as well as events in education. Curriculum guidelines and models of instructional materials are produced after carrying out curriculum research with end users of the products or outputs. The schools develop their own curricula after the field advisory groups have presented their recommendations. The field advisory groups consist of teachers from various regions who are familiar with the educational practices to identify needs. Every school in the Netherlands is required to set up a Participation Council representing staff, parents and students. The staff, pupils and parents have also their councils respectively. After carrying out an investigation into a curricular concern for the school in collaboration with the field advisory groups, these councils make their recommendations to the Participation Council. The curriculum for each school is included in the school plan featuring teaching objectives, subjects, teaching methods, the means used to assess pupils' academic achievement, and so on. Each year, the two year school plan is further developed into an activity plan which sets out the pupils' activities for the year in question, the duties of teachers, the teaching time, holidays and other free days. No requirements are specified for subject content or teaching methods. However, the school plan and the activity plan are submitted to the Inspectorate for approval. This system is quite conducive for curriculum innovation and development under the jurisdiction of the school itself, adapted to its specific target group and to its own profile. The National Institute for Curriculum Development has over the years provided assistance to the schools in managing the process of developing school plans.

The schools develop their own school specific curricula in terms of compulsory subjects and overall time allocation. The schools are free to determine how much time to devote to each subject and method provided they meet core objectives introduced in August, 1993. In January, 1994, the primary Education Evaluation Committee published its report on the state of primary education in the Netherlands. It concluded that there were a great many subjects in the curriculum which results in an overloaded curriculum within the teaching time available. Following this report an investigation was launched into measures to be adopted in order to rectify the situation. In subsequent years, the National Institute for Curriculum Development was requested by the Ministry of Education, Culture and Science to revise the attainment targets for primary education as one of the ways to solve the problem of an overloaded curriculum. The Institute completed its work in early 1998 and the revised attainment targets for primary education were implemented in August 1998.

The Ministry of Education, Culture and Science prescribes the educational targets to be achieved by schools. It does not develop the instructional materials. School textbooks are produced by commercial publishers. School teachers and the staff of the National Institute for Curriculum Development write the text books when they are commissioned by the commercial publishers interpreting the aims and objectives. The schools buy the text books on the free market. Teachers select the text books to be used in the class by using selection criteria. The National Institute for Curriculum Development produces a consumer guide to teaching materials to help schools compare existing products with new

ones. Once bought, the text books are the property of the schools and are only loaned to the pupils.

The philosophical conception of the school curriculum in the Netherlands advocates a well balanced curriculum geared to children's development and the demands of the society. On the basis of guidelines issued by the Ministry of Education, Culture and Science, individual schools draft their own school plan which describes the curriculum, educational objectives, teaching methods, academic achievement, evaluation and everything else related to the organization of a particular school. So the curriculum is a single document produced under a school plan for each school in the Netherlands. The Inspectorate approves the contents of the curriculum designed by each school.

Finland

The origin of the curriculum reforms undertaken in the 1990's in Finland may be traced back to the 1980s. They were inspired by a reaction to the teaching and learning based on following a centralized curriculum of 1985. Evidence in the source documents indicates that Finland has had a long established tradition of following a centrally designed curriculum. However, the feeling in the 1980s was that the needs of individual pupils could best be served by reducing state control and increasing local decision making. The source documents do not specify who in the community expressed this reaction: whether parents, teachers, etc. They also do not state the fora at which such a reaction was expressed (Chishimba and Luangala, 2000), but they do state that this reaction was part of the desire by the Finnish citizenry to decentralize governance generally.

In Finland, there have been four points at which decisions regarding education delivery could be taken: the National Board of Education as the central expert agency of the Ministry of Education, the provincial authorities as the link in the chain of educational delivery, the municipalities as the immediate supervising authorities, and the schools themselves. Two of these organs played key roles in the curriculum reform process under review: the National Board of Education on one hand, and the individual schools on the other. The provincial authorities did not do much more than convey decisions to and fro; they were in fact being trimmed down as their role was perceived to be less important. Some of the municipalities closely supervised the individual schools in designing their curriculums, while others went only so far as just formerly approving a school's curriculum through the municipal board of education. The reforms proceeded as described below.

First the National Board of Education drafted curriculum guidelines (the National Framework Curriculum) in 1992 for the entire country. These were supposed to be interpreted into a curriculum by individual comprehensive schools to suit their aims and objectives. It may be appropriate to mention here that a comprehensive school in Finland is designed to offer 9 to 10 year long compulsory education, almost comparable to the current conception of basic education in Zambia.

The National Board of Education engaged consultants from the Centre for Applied Research in Education (CARE) at the University of East Anglia in England to evaluate

the reforms. Their report was published in 1996, the report was highly critical of the reform on two accounts: its scale was too vast, and its speed was too ambitious.

Among a host of reasons why the reforms were not successful as had been anticipated, the key ones were as follows. First, the reforms were conceived at the time Finland was enjoying an economic boom, but the situation had changed for worse at the time the reforms were to be carried out. This meant cuts in budgetary allocations from the central government to municipalities, and eventually to schools. The reforms had to be carried out with little funding. This necessitated the paid hours for teachers to be cut, and with this many teachers lost morale. There was reluctance to work extra hours for nothing.

Secondly, evaluators found evidence that many teachers had not taken the reforms seriously. Even some of the schools that had participated in the experiments (the Aquarium schools) thought that it was just one of the many projects that had come and gone; when the experiments ended, these schools felt relieved, saying they could now go back to what they had been doing before. Extra funding had been provided for the experiments. The absence of extra funding during the main part of the reform exercise worked to strengthen their feeling that the project had come to an end. For some schools, cuts in budgetary allocations may have been interpreted to mean that the reforms were not at all important.

Thirdly, isolated schools with few teachers lacked encouragement from others. There was evidence that some of them knew very little about what was going on anyway.

Even if the curriculum Framework had been circulated, some teachers had never bothered to read it. Fourthly, not many teachers had the competence to design their own curriculum from the guidelines given in the Framework Document; they had never done it before. Some teachers were given some training for two or more weeks and then sent back to their municipality to go and teach the others, what is known as the cascading-model in literature. Not every subject area had a teacher trained in a locality, which meant that teachers of one subject were expected to teach others even from a different specialization. This did not work well, because teachers tended to shun those workshops where the resource person was a specialist in a different subject area; they did not perceive the relevance of such a workshop to their concern. In addition, old habits die hard; the culture of teaching based on following the text book very strictly was well entrenched, and the culture of collective planning was absolutely new.

Six Dilemmas in Teacher Education

The major issues of concern to those who have a stake in the preparation of teachers are discussed in terms of a set of six dilemmas: coverage versus mastery; evaluative versus affective emphases; emphasis on current versus future needs of candidates; thematic versus eclectic approaches; emphasis on current practice versus innovative practice; and specific versus global assessment criteria. These dilemmas are endemic to teacher education and may account for both the dissatisfaction with teacher education and the low level of impact attributed to it.

Each group with a stake in the preparation of teachers such as governments, local educational authorities, teachers, parents, teacher educators and the candidates themselves have complained that teacher education has little impact on the candidates. Graduates in teacher education have characterized their experience as less than satisfying and of doubtful practical value (Harris and Associates,1990). Each group has expectations of what teacher education should accomplish and its own favourite explanations for why it falls short much of the time. Katz and Rath (1992) have identified some of the major issues of concern to those who have a stake in the preparation of teachers are discussed in terms of a set of six dilemmas that are endemic to teacher education. Of the six dilemmas, the first three are generic to all education; the remaining three are more specific to teacher education. These six dilemmas do not exhaust all dilemmas teacher educators face. Rather, they are enduring and especially nettlesome in this discussion of six dilemmas. A dilemma is described as a predicament that has two main features, it involves a situation that offers a choice between at least two courses of action, each of which is problematic and it concerns a predicament in which the choice of one of the courses of action sacrifices the advantages that might accrue if the alternative were chosen. In sum, a dilemma is a situation in which a perfect solution is not available. Each of the available choices in such predicaments involves a choice of negative factors as well as positive ones.

The first dilemma is *coverage versus mastery emphases*, all teachers face conflicting pressures to emphasize either coverage or mastery of the content and skills to be taught. The more content and skills pupils cover, the less they can master, and vice versa.

Teachers cannot do justice to coverage and mastery at the same time. Teacher educators are under constant pressure to expand the curriculum to cover more content and skills. Rarely are proposals put forward to eliminate a programme component. As schools take on more and more responsibility to address the ills of society such as substance abuse, crime, violence, teenage pregnancies, suicide and other vices, corresponding pressure grows to add topics to the already crowded teacher education curriculum. Another responsibility facing teacher educators is that of preparing teacher candidates for examinations leading to licensure. Addressing this responsibility as a principal focus requires a mastery emphasis. Part of the pressure to maintain or expand coverage of the content and skills in teacher education stems from the expansion of knowledge and information in the disciplines related to teaching. Expansion of knowledge applies not only to subjects taught in schools but also to such disciplines as child development, psychology of learning, sociology of learning, methods of teaching and aspects of special education. Teacher educators may believe that it is more important to introduce these topics to their candidates, even if only superficially, than to graduate prospective teachers who have never heard of them. Most teacher educators are convinced that teacher preparation is only a beginning and that teacher development is an ongoing, career - long process, they may elect to help candidates anticipate what they need to learn by covering many topics superficially rather than to teach fewer topics at the mastery level.

A coverage emphasis might be seen as most appropriate for programmes in elementary and early childhood education, where candidates are required to become generalists.

Emphasis on mastery has important implications for teacher education curriculum. Instead of being exposed to a smattering of topics, candidates would master a carefully selected and limited number of topics well enough to retrieve and apply them in real teaching situations. A mastery emphasis would give candidates greater feelings of competence and confidence in the knowledge and skills they have learned. Courses would probably have a longer lasting impact on graduates. In contrast, when programmes require coverage of a wide range of topics, candidates are more likely to feel pressured to cram course content to cope with assignments and examinations. Approached in this manner, the content covered is likely to be perceived by candidates as inert rather than anchored in experience and accessible to them in their teaching.

In some respects, the mastery/coverage dilemma can be analysed as a problem of perception. Any attempt to tip toward mastery is somewhat compromised by our awareness that the knowledge explosion, often cited to justify coverage emphases, is likely to continue. The specifics of what is being taught in teacher education today are likely to be replaced tomorrow, suggesting that the greatest contribution teacher education programmes can make is to strengthen appropriate dispositions (e.g. being accepting, patient, thoughtful, resourceful, experimental, cooperative and open minded) can be addressed as the most important aspects of the programme. A teacher education programme can give a mastery focus to the dispositions they are seeking to strengthen and at the same time a coverage focus to a wide variety of important topics.

Although this approach includes both coverage and mastery values, we must recognize that the dilemma has not vanished. Teacher education faculty will be able to strengthen only a small number of dispositions in their candidates. Choices still must be made.

The second dilemma is *evaluative versus affective emphases*. Part of the teacher educator's role is to evaluate the progress of candidates in the programme. Evaluation in teacher education is undertaken principally to exclude weak or inept recruits from entering the profession. It also gives direction to candidates to improve their performances as prospective teachers. Another part of the role, creating a dilemma for teacher educators, is the obligation to address learners' needs for support and encouragement. Conducting realistic evaluations of candidates requires a certain distance between faculty and candidates and creates some wariness between them. When a faculty chooses to emphasize support and encouragement and to create feelings of closeness, they are likely to withhold negative feedback. Some teacher education programmes are dedicated to providing candidates experiences from which they get feelings of success. This approach emphasizes warm encouragement and positive feedback as a basis for stimulating the candidate's growth in self confidence. This strategy is most often evident in student teaching placements. Advantages of an affective emphasis in teacher education are that most candidates need some emotional support and encouragement to help them through rough spots. Recent interest in the potential value of providing new teachers with mentors is based on the assumption that experienced colleagues can provide needed emotional support in addition to professional know-how (Austin, 1990).

Teacher educators , especially in their roles as supervisors of field experiences, learn to expect strong pressure from candidates for support and encouragement. Many student teachers need positive feedback that tells them to “keep going” and “try again” in the face of fumbling first efforts. The major advantage of emphasizing the helping and nurturing aspect of the roles of teacher educators is that with support many candidates will improve their competence and persevere.

On the other hand, candidates in programmes characterized by an evaluative emphasis may feel more confident in their readiness to function as professionals for they know that they have survived a stringent evaluation process while weaker candidates have not. Little concern for evaluation may signal that almost anything goes and deprive candidates of a positive identification with the profession to which they aspire. Some believe that teacher education programmes suffer from the perception and reputation, deserved or not, that almost everyone who starts a teacher education programme succeeds in finishing it. By emphasizing evaluation, and by making evaluations rigorous and exacting, teacher education programmes might begin to shake the reputation that they lack intellectual rigour. As programmes emphasize the helping and nurturing aspects of the teacher educator’s role, candidates are likely to be more satisfied with their educational experiences. On the other hand, evaluation procedures that are highly formalized and rigorously applied are likely to undercut this warm and caring ambience. One approach that can preserve the nurturance in the programme is to separate the formative and summative evaluation roles. Coaching roles could be assigned to some faculty, and summative evaluation roles could be assigned to others.

The former could be charged with providing support to candidates, giving them the strength to keep trying under the watchful and caring eyes of the university supervisors.

The third dilemma is *emphasis on current versus future needs of candidates*. During their pre-service preparation, candidates are typically at a stage in their development characterized by high dependence on their lecturers for direction, prescription and evaluation. Fuller (1969) described teachers in this stage of their professional development as having “self concerns.” Teacher educators may be disposed to do something for their candidates that will satisfy them at this time without considering what is best for their students in the long term. For example, teacher educators can indulge and gratify their candidates’ concerns by providing what they claim to need in the way of specific guidelines and tips for teaching. On the other hand, teacher educators can resist candidates’ dependency needs and encourage them to begin to take responsibility for their own learning and professional development by withholding specific detailed academic requirements, directions and prescriptions.

Some of the advantages in addressing current needs are that teacher educators demonstrate and present methods of instructions in the form of recipes, gimmicks and quick fixes that are easily digested and understood, candidates are likely to feel confident that they are preparing for the teaching role. The concerns of undergraduates will be especially well met if the approach taken in the programme avoids theory and a discussion of the complexity of teaching.

Further, as the requirements of the teacher education programme place candidates early and often in schools with children, they will feel as though they are in the right place for learning how to teach. A focus on current needs avoids a pitfall associated with all professional preparation programmes: namely, providing candidates with answers to questions they have not yet asked and preparing them for eventualities rather than actualities. By concentrating on the current concerns of candidates, faculty can keep their courses from becoming, in the eyes of the candidates, remote and inert.

Some perceived advantages in addressing future needs of candidates are that in some respects what are seen to be future needs of candidates accommodates the needs of teacher educators more than those of candidates. As experts in teaching and teacher education, they feel confident in their own knowledge of what is important for teachers to know and learn. By acting on their beliefs and values in this situation, teacher educators may feel more useful and true to their calling. An analysis of follow-up studies demonstrated that the judgments of teachers about experiences in their pre-service programmes change over time (Katz, Raths, Kurachi and Irving, 1981).

One of the critical questions asked about laying emphasis on current versus future needs of candidates is: Should a programme in teacher education concentrate on offering a curriculum that caters for the current needs and concerns of candidates, or should it make an effort to answer questions that the candidates are not yet ready to ask but that are seen by teacher educators to be of critical significance for the future? Addressing this dilemma can be difficult.

The current interest of candidates is at least in part concerned with “making it through college,” “getting good grades,” and “completing the assignments” (Goodlad, 1990).

The fourth dilemma is *thematic versus eclectic approaches*, some teacher education programmes are designed around a coherent theme that includes a particular philosophy, curriculum or pedagogical model. Every course in the programme advances the common theme by using it as a basis for selecting readings, giving feedback, and evaluating the progress of candidates. On the other hand, programmes without themes encourage faculty to “do their own thing.” Under this eclectic approach, faculty members order their own texts, prepare their own assignments, and evaluate candidates using their own frameworks without any systematic consultation with colleagues or with programme policies. Candidates in such programmes are encouraged to choose the courses they want to take from the instructors they prefer. Very little philosophical coherence exists across courses, except by sheer accident or circumstance. The horns of this dilemma are whether to organize teacher education programmes around a theme, philosophy or model or to give faculty license to take an eclectic approach in which each faculty member advocates a preferred philosophy or pedagogical model.

Some of the advantages of a thematic approach are that a programme organized around a single coherent theme and a unified approach to teaching may have stronger impacts on candidates’ practice of teaching than one that is unfocused (Barnes, 1987). As candidates in teacher education are likely to be at a stage of development in which clear and unambiguous guidelines or rules for handling routine tasks of teaching are sought,

a single approach without competing alternatives can be a source of clarity and may build candidates' confidence and be more satisfying to them. Some candidates may perceive an eclectic approach as the faculty's abdication of its own professional judgment. In such cases, they may simply dismiss the faculty as a group of competing ideologies unworthy of respect. Candidates expressing such views may find cooperating teachers of similar views, and the two groups may well develop a united front against the faculty, further diminishing the programmes' impact.

Without denying the impact likely from their thematic programmes, there are difficulties with this approach. The first is that a programme organized around a coherent theme may well become shrill and cloying, indoctrinating candidates into particular views about teaching and learning. As Buchmann and Floden (1990:8) put, "A programme that is too coherent fits students with blinders, deceives them, and encourages complacency. In teaching, the comforts of settled opinion are neither realistic nor functional. A doctrinaire approach is antithetical to the ethos of a university that prizes openness to alternative points of view. One of the original arguments for locating teacher education in a university instead of in a single -purpose teacher training institution such as a normal school was that exposure to a wide range of ideas and intellectual endeavours would be a valuable part of the socialization of prospective teachers.

If a faculty adopts a theme, the certitude with which it is advanced can lead to the indoctrination of candidates.

If there is no theme, candidates are free to elect courses and faculty on their own personal bases, and faculty are given the option of teaching whatever they want. In the latter case, the chances are great that candidates will be dissatisfied with the programme and that the impact of the programme on candidates will be weak. Their dissatisfaction will arise from hearing contradictory views from their instructors about what constitutes good teaching. Students are likely to perceive the dissonant ideals and goals of the faculty as confusing. As a result, all the ideas may be rejected, and the sources of the dissonance – the faculty members – be discredited. Faculty may elect at least two ways to address this dilemma. The first is to select a theme for their program that is sufficiently narrow to discipline the approaches faculty use to plan programmes, conduct evaluations, and focus the attention of candidates to a well-defined knowledge base. Examples of such themes might include “teaching for diversity”- emphasizing individualizing instruction in a classroom – or “teaching for understanding” – stressing the teachers’ need to apply their skills to lead pupils to more sophisticated understandings about what is being in class. Both of these themes high light what is taught in courses within a prgramme, but not in ways that are unduly restrictive. A second approach is to permit faculty to offer competing programmes simultaneously. Under this approach, candidates have the opportunity to choose the themes of their programmes, and faculty are encouraged to collaborate with several others to develop thematic approaches.

The fifth dilemma is emphasis on current practice versus innovative practice. The thrust of some teacher education programmes is to prepare candidates to perform successfully in today’s schools.

In fact, the emphasis of late on mandated early field experiences and extended periods of student teaching is motivated in part by the goal of acclimating candidates to the current school scene. On the other hand, some programmes are committed to preparing candidates for schools that would represent improvements over today's schools. Thus, a teacher education programme faculty can choose to focus on helping candidates acquire competence in the current standard practices of the schools available to them or programme faculty may give priority to helping candidates learn the most recently developed innovative practices – ones that are rarely seen in today's schools. Due to the finite amount of time available to teacher education faculty, not all possible pedagogical methods can be covered and taught.

Some of the advantages of emphasizing current practices are that a good grounding in current teaching practices prepares graduates to take up their positions with a minimum of adjustment problems. New teachers can seek suggestions and advice from experienced colleagues and can recognize that they are in the early stages of learning the teaching methods others in the school have long used. Having been trained in current standard practices, new teachers are likely to experience a sense of continuity between their student teaching experience and their first teaching assignment. An emphasis on current practice is also likely to minimize conflicts between teacher education faculty and cooperating teachers. Advantages of emphasizing innovative practices in teacher education are that colleges of education should be seen to develop new knowledge and innovative practices by which the profession's standard and contributions to the general welfare are improved.

Professional colleges of education carry out this function most effectively when faculty members work to introduce innovative practices into the teacher education programmes. It is assumed that when recruits are equipped with new knowledge and improved techniques, they will contribute over time to the upgrading of professional practice. Of course, new teachers can become discouraged when they enter the current school scene to find the innovative practices they have learned are either rarely invoked or actually discouraged by local school norms.

Without emphasizing innovative practice, the research and development mission of the university would be difficult to justify. A brief internship or a training programme characteristic of the apprenticeship found in the normal schools of former times would suffice to prepare teachers for current schools. Teacher educators should pride themselves in helping new teachers develop innovative practices.

The sixth dilemma is *specific versus global assessment criteria*. A teacher education programme faculty might define its objectives in crisp, concrete and specific ways, making clear to all of its candidates precisely what is expected of them. This approach was prevalent during the competency-based teacher education / performance – based teacher education of the mid-1970's (Howey and Zimpher, 1989). High specificity in the criteria for assessing the progress of candidates has several advantages. First, the more specific the criteria are, the more easily they can be shared with candidates in unambiguous ways.

Thus candidates easily come to know what is required of them. Secondly, the more assiduously candidates work at attaining success on them (Natriello and Dornbusch, 1984). Thirdly, most teacher education candidates are admitted into higher education because of successful socialization into the disposition to work for good grades and to pass examinations. They are therefore likely to feel comfortable and satisfied with the programme when the grading criteria are clear. Specificity and explicitness concerning how candidates' progress and performance are to be judged are consistent with a sense of fairness.

The advantage of a global approach to assessment of candidates' progress is that it takes into account the complex nature of teaching. The more explicit and specific methods of assessment are likely to lead to trivial notions of teaching. Holistic criteria might, for example, include professional dispositions that are difficult to specify in detail and depend upon observations of candidates over time (Katz and Raths, 1985). Holistic judgements also enable teacher educators to put candidates' behaviors into a context of multiple occasions and situations in which they have been observed, and a sense of how they might function in the complex professional environment of a school can be incorporated into the evaluation procedures. Without a broad conceptualization guiding both instruction and evaluation, the ethos created by an emphasis on specific criteria is apt to be more technical than intellectual and is therefore unlikely to cultivate such intellectual disposition as reflectivity and openness to new ideas and to alternative interpretations of teaching predicaments. This is not to gainsay the advantages of specificity.

Under a global approach, candidates are likely to be dissatisfied in that they may feel the assessments are arbitrary and unfair or so unclear that it is difficult to know how to improve. Candidates are apt to become resentful when faculty members appear unable to answer questions such as “What precisely is it that you want me to do?”

Assessment of candidates’ progress is one of the most stubborn predicaments facing teacher educators. In fact, this issue is reflected in two of the six dilemmas we have presented. One aspect of any evaluation system that bears on the way it is perceived is its fairness. The extent to which an evaluation emphasis in teacher education leads to candidate dissatisfaction may be related to the fairness with which it is implemented. There are at least two ways in which evaluation procedures are likely to be deemed fair, represented by each horn of this dilemma. The first is to make the process as objective as possible – using test scores, objective observations, and behavioural objectives as the bases for the evaluations. For such a system to be deemed fair, there would be need to frequent feedback to the candidates throughout the period of preparation accompanied by lengthy conferences in which formative judgments are explained and translated into plans for improving performance. Another approach for accommodating the conflicting pressures involved in this dilemma might be to use both specific and holistic evaluations as a form of triangulation. Specific assessment criteria can be applied to the instructional context of formal profession studies, while holistic criteria are used in the informal context of a teacher educator’s evaluation of individual candidates. When the specific criteria of grades and scores differ from the holistic judgments of programme faculty, special reviews can be conducted of the cases that reflect a disparity to attempt to understand more clearly the sources of dissonance and to improve the faculty’s

understanding of its application of the assessment process. In sum, these six dilemmas related to teacher education may not be mastered, solved or overcome easily. They are enduring and intractable. Our analysis suggests at least three things. Firstly, our frustration with efforts to reform teacher education are likely rooted in these dilemmas. Secondly, our realization that we are facing unsolvable, enduring dilemmas should not be used as an excuse for inaction in teacher education.

Summary

The present chapter provides a review of the available literature that is considered to be of direct relevance to the present study in order to place the investigation within the context of similar studies. The presentation is organized under the following sub-headings; teacher training before independence, teacher training after independence, teacher education – an international review, models of pre-service teacher education, curriculum reforms in teacher education in other countries and dilemmas in teacher education.

CHAPTER FOUR

METHODOLOGY

Overview

This chapter discusses the research methodology used in the investigation of curriculum innovations in Pre-service Primary Teacher Education in Zambia. The chapter presents details relating to the type of research design employed in the study, the data collection instruments and procedures as well as the data analysis process. The chapter also states the criteria used to choose each research method and explains the research process as a whole.

The chapter comprises four sub-sections. The first one looks at epistemological issues in educational research while the second one focuses on the specific paradigms employed in the present study. The third subsection presents a detailed explanation of the specific procedures adopted in data collection while the fourth subsection provides information with regard to data analysis procedures employed in the present study.

Epistemological Issues in Educational Research

The research process is often full of conceptual and practical difficulties, and there is no simple rule book or rule of thumb that all researchers must use to guide their field work in terms of research. Just as there are different theories about social phenomena, so different theorists tend to adopt different research methods in order to collect data, to test or analyse their particular views on society. *One might ask, aren't some research methods better than others?* Unfortunately, there is no simple answer to this question.

The research method one adopts is likely to be tied to certain assumptions about how to observe and understand social phenomena, e.g. pupil's behavior and ideas. Such assumptions can sometimes be challenged by other researchers who may in turn question the very methods one has chosen.

Epistemology is the branch of philosophy that studies the nature of knowledge and the process by which knowledge is acquired and validated (Philips, 1987). Some researchers have a particular interest in the nature of inquiry and knowledge in the natural sciences or social sciences. The other question asked is: *Is inquiry/research in the social sciences fundamentally different from research in the natural sciences?* As researchers have investigated the nature of scientific inquiry over the years, they have developed different schools of thought. There are two schools of thought that define social reality: positivism and post positivism.

Research Design

In this study, a descriptive survey design was used to carry out the research. In general, a research design is defined as the overall strategy for conducting an inquiry. It involves the translation of research objectives into a specific plan for data collection and analysis (Bulmer and Warwick, 1993). Research design refers to the plan and structure of the investigation used to obtain evidence to answer research questions. The design describes the procedures for conducting the study, including when, from whom, and under what conditions the data will be obtained.

In other words, the research design indicates how the research is set up and explains what happens to the respondents and methods of data collection used. The study employed both qualitative and quantitative techniques in order to collect detailed information about curriculum innovations in pre-service primary teacher education in Zambia. This design involved the use of questionnaires, interview schedules, focus group discussions and analysis of documents. This enabled the researcher to gather data from a cross section of respondents from different parts of the country. To a large extent, the study followed qualitative methodologies which are methods that produce descriptive data. Qualitative research seeks to understand social phenomena from the actor's own perspective and how the world is experienced, and the motives and beliefs behind people's actions on a personal level. Reality is what people perceive it to be.

Justification for the research design

Phenomenological perspectives in Sociology were employed in this study, in particular the interactionist perspective. Phenomenological perspectives reject many of the assumptions of positivism. They argue that the subject matter of the social and natural sciences is fundamentally different. As a result, the methods and assumptions of the natural sciences are inappropriate to the study of man. The natural sciences deal with matter. To understand and explain the behaviour of matter it is sufficient to observe it from the outside. Atoms and molecules do not have consciousness. They do not have meanings and purposes which direct their behavior. Matter simply reacts to external stimuli; in scientific language it behaves. As a result the natural scientist is able to observe, measure and impose an external logic on that behavior in order to explain it. He

has no need to explore the internal logic of the consciousness of matter simply because it does not exist. Unlike matter, man has consciousness, thoughts, feelings, meanings, intentions and an awareness of being. Because of this, his actions are meaningful, he defines situations and gives meaning to his actions and those of others. As a result, he does not merely react to external stimuli, he does not simply behave, he acts.

Interactionism is concerned with interaction which means action between individuals. The interactionist perspective seeks to understand this process. It begins from the assumption that action is meaningful to those involved in it. Therefore, it follows that an understanding of action requires an interpretation of the meanings which actors give to their activities. Meanings are not fixed entities, they depend in part on the context of the interaction. Meanings are also created, developed, modified and changed within the actual process of interaction. The way in which an actor defines a situation has important consequences. It represents his reality in terms of which he structures his actions.

Interactionism as already pointed out attempts to see things from other people's points of view. They view human behavior in terms of what people say and do as a product of how people define their world. There are several characteristics attributed to interactionism. The first is that it places primary importance on the social meaning people attach to the world around them. Blumer (1969) argues that interactionism rests on three basic principles. The first principle is that people act towards things, including other people, on the basis of the meanings these things have for them.

The meaning determines action. The second principle is that meanings are not inherent in objects, but are social products that arise during interaction. People learn how to see the world from other people. As social actors, we develop shared meanings of objects and people in our lives.

The third principle is that social actors attach meaning to situations, others, things and themselves through a process of interpretation. In this case, it is important to accept other people's opinions. Interactionism also recognizes that different people say and do different things because of reasons such as people have different experiences and have learn't different social meanings. People also find themselves in different situations. The process of interpretation is, therefore, a dynamic process. How a person interprets something will depend on the meanings available and how he/she thinks about the situation. Interactionists also contend that all organizations, cultures and groups consist of actors who are involved in a constant process of interpreting the world around them, that although people may act within the framework of an organization, culture or group , it is interpretations and definitions of the situation that determine action, not their norms, values, role or goals.

Population

The target population for this survey were officials of the Directorate of Teacher Education and Specialised Services (TESS); Principals of Primary Colleges of Education or their Vice Principals and Lecturers in Primary Colleges of Education; Teacher Education Departments at the Curriculum Development Centre (CDC) and Examination Council of Zambia (ECZ); Civil Society Organizations working in primary teacher

education; Teacher Resource Centres; Retired eminent educationists familiar with primary teacher education in Zambia were also included.

Sample

Sampling is a process of drawing a sample from a population. When we sample, we study the characteristics of a subset, called the sample selected from a larger group called the population to understand the characteristics of the larger group (the population). The basic objective of any sampling design is to minimize, within the limitation of cost, the gap between the values obtained from the sample and those prevalent in the population. Sampling is an important aspect in research because it facilitates the representation of the population from a few participants in the study. Robson (1993) defines sampling as the search for typicality. The sample should relate to the real population. In addition, sampling is an important aspect of life in general and enquiry in particular and that judgements are made on the basis of fragmentary evidence. Redestam and Newton (1992) define a sample as a subset of the population that is taken to be a representation of the entire population. They believe that regardless of its size, a sample that is not representing the entire population is inadequate for testing purposes and that the results cannot be generalized. Similarly, Kane (1995) notes that sampling is vital in research because studying the entire population would be very costly and time consuming. Emphasis is placed on ensuring that the results of the sample ought to be similar to those, which would be obtained if the entire population were involved in the study.

In this study, the researcher employed non-probability sampling procedures as the investigation intended to gather in-depth information on issues relating to the impact of curriculum innovations on pre-service primary teacher education in Zambia.

The sample comprised 155 informants drawn as follows: Three senior officers from the Directorate of Teacher Education and Specialised Services; Six principals / Vice-principals; one hundred and twenty-two college lecturers; four officials from selected teacher resource centres; three officials from the Examinations Council of Zambia; three officers from the Curriculum Development Centre; four officials from local civil society organizations supporting teacher education in Zambia and nine retired imminent educationists familiar with issues in primary teacher education in Zambia.

Field Visits

The researcher visited sample institutions and individuals in the country as indicated below.

Province	College Principal or Vice	Civil Society Organisation	College Lecturer	TRCs	ECZ	TESS	CDC	Retired Educationists	TOTAL
Lusaka	—	3	—	1	3	3	3	2	15
Copper Belt	2	1	36	—	—	—	—	2	41
Eastern	1	—	18	1	—	—	—	1	21
Southern	2	—	32	1	—	—	—	2	37
Western	1	—	18	—	—	—	—	1	20
Northern	1	—	18	1	—	—	—	1	21
TOTAL	7	4	122	4	3	3	3	9	155

Sampling Procedure

Purposive sampling procedures were used in this study. Purposive sampling is based on the judgement of a researcher regarding the characteristics of a representative sample. The strategy in purposive sampling is to select elements that are deemed to be typical of the population under investigation. The researcher purposely chooses subjects who, in their opinion, are thought to be relevant to the research topic. (Cohen and Manion 1998) In this case the judgement of the researcher is more important than obtaining a probability sample. A purposive sample is one where respondents are selected according to a specific pre-determined criterion, while a quota sample is a selection procedure whereby participants are chosen to match a pre-determined numerical distribution for the general population. The logic of purposive sampling lies in selecting information-rich cases for in-depth study (Patton, 1990). Information – rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the study. The use of purposive sampling was to ensure that only gate-keepers or key informants were allowed to take part in the in-depth interviews. The assumption was that these categories of participants were more conversant with the social dynamics of curriculum innovations in pre-service primary teacher education and could provide rich information on the subject under investigation.

Snow ball sampling was also used to locate former or retired inspectors from teacher education, retired college principals and other eminent educationists. In Snow ball sampling, each research participant that volunteers to be in the study is asked to identify one or more additional people who meet certain characteristics and may be willing to

participate in the study. Only a few individuals might be identified in the beginning of a research. Overtime, as each new participant suggests someone else who might participate, the sample becomes larger and larger. This sampling approach can be useful if you need to locate members of hard-to-find populations (Newby, 2010).

Data Collection Techniques

Data was collected through questionnaires, interview schedules, focused group discussions and analysis of documents. The choice of which research method to use was guided by six criteria adapted from Silverman(1993). Each one of these criteria played a key role in guiding the researcher into choosing a combination of qualitative and quantitative research methods that were considered adequate in addressing the research problem in a satisfactory manner. Specifically, five techniques were used: survey questionnaires, interviews, focused group discussions, in-depth interviews and analysis of documents. Questionnaires were used to College Lecturers, officers at TESS, CDC and ECZ. Semi-structured interviews were used to some College Lectures, Teacher Resource Centre Co ordinators and Civil Society Organisations. In-depth interviews were used to College Administrators, Eminent Educators in Zambia familiar with teacher education issues, officers at TESS, CDC and ECZ. Focused Group Discussions were only used to College Lecturers.

Survey Questionnaire

A self-administered questionnaire was used as a data gathering instrument. The questionnaire assessed the perceptions of respondents on curriculum innovations in pre-service primary teacher education. The questionnaire utilized a Likert response format. The Likert response format requested respondents to indicate whether they strongly agreed, agreed, disagreed or strongly disagreed with the statement posed in the questionnaire item. This format was selected because of its ease of understanding to audiences with minimal familiarity with survey research. Neutral choices were eliminated on the basis of the pilot study, as they tended to be over used by respondents. In order to compensate for the removal of the neutral choices on the Likert response format, efforts were made to focus on topics about which the respondent could reasonably be expected to have an opinion.

Wimmer and Dominick (1994) have observed that the survey questionnaire is important when the researcher wants to get a general idea of the nature of public opinion. Therefore, the survey questionnaire is regarded as the key research instrument in survey research. Gall and Borg (2007) note that questionnaires and interviews are used extensively in educational research to collect data about phenomena that are not directly observable: inner experience, opinions, values, interests, and the like. They also can be used to collect data about observable phenomena more conveniently than by direct observation.

For example, it is much easier to use a questionnaire or interview to ask a Principal how many students are in the science teaching class than to walk around the college counting students. Questionnaires are printed forms that ask the same questions of all individuals in the sample and for which respondents record their answers.

Semi-structured interviews

The semi-structured interview was one of the techniques used to collect data in this study. Interviews consist of oral questions asked by the interviewer and oral responses by the research participants.

Interviews typically involve just one respondent at a time, but there is increasing interest in conducting group interviews. Respondents typically speak in their own words, and their response are recorded by the interviewer, either in short –term memory for later note taking, verbatim on audio tape or video tape , or through handwritten or computer-generated notes. The interviewer is largely in control of the response situation, scheduling with the participant in a mutually agreeable time and place to carry out the interview and then controlling the question pace and sequence to fit the circumstances of the situation. Patton (1990) identifies interviews as one of the qualitative research methods and states that the purpose of interviewing is to find out what is in someone else’s mind since we cannot observe feelings, thoughts and intentions. Wimmer and Dominick (1994) provide some criteria for in-depth interviews arguing that they are usually longer, more detailed, customized to individual respondents and can easily be influenced by the interview climate.

Kane (1995) states that a semi-structured interview does not have a standard format but there is an agenda that is used as a reminder to ensure that basic points are covered. The advantage is that semi-structured interviews can give greater depth than a questionnaire, because one can probe or encourage people to expand their answers and also crosscheck information. By this instrument, one is able to pursue useful information by asking questions relating to why and how a given phenomenon occurs. Minichiello (1995) notes that an interview guide or schedule is developed around a list of topics without fixed wording or fixed ordering of questions. The context of the interview is focused on the issues that are central to the research questions, but the type of questioning and discussion allow for greater flexibility than does the survey questionnaire. Guided by the criteria outlined earlier, it was felt that an interview given its explanatory power, was an appropriate technique to solicit information from all key informants in order for the researcher to objectively and adequately provide answers to all the research questions outlined in the study.

The use of semi-structured interviews enabled the researcher to meet the requirements of the naturalistic approach to data collection by discussing and asking additional probing questions as the responses were being given. The semi-structured interview was chosen for this study because it gave the researcher room for additional questions during the course of the interview. The semi-structured interview contained questions on the impact of curriculum innovations on pre-service primary teacher education in Zambia.

In order to ensure uniformity in the collection of data, the researcher depended on the interview guide. An interview guide is a list of questions or issues that are to be explored in the course of an interview. The advantage of the interview guide is that it ensures that basically the same information is obtained from a number of people by covering the same material. The interview guide helps make interviewing across a number of different people more systematic and comprehensive by delimiting in advance the issue or issues to be explored. The content of the interview guide was based on the research questions in line with the research objectives. The interviews were conducted wherever the respondents felt most convenient. During the interview process the researcher was able to probe further as well as to counter check some of the major and interesting issues arising from the responses. The researcher wrote down all the relevant responses.

Focus Group Discussions

Focus Group Discussions provided another important source of information on the impact of curriculum innovations on pre-service primary teacher education in Zambia. The FGD's sought to establish the general attitudes, motives and beliefs of college lecturers on teacher education. An attempt was also made to establish the common problems faced by college lecturers in implementing different programmes in teacher education. The FGD's used to comprise between seven and ten members of different sex. The researcher facilitated all the group discussions. This arrangement made it possible for the researcher not only to ask questions where clarifications were needed during the discussion,

but also to pay more attention to what was being said both verbally and by non-verbal communication such as facial expressions and gestures, which can indicate levels of approval or disapproval.

In-depth interviews

In-depth interviews were intended to get detailed information and explanations that emerged from the survey. Key informants such as officers from MoE/TESS, College Principals, Vice Principals, Officers from ECZ, CDC were subjected to in-depth interviews. This was based on the realization that sometimes when a person is answering questions in a private way, they are able to say more on sensitive topics than they could otherwise do within a Focused Group Discussion.

Key informant interviews are an important method of collecting data from well informed people or experts (Moody,1996). The merit of this approach lies in guided interviewing in which some of the questions and topics are pre-determined, while the rest come up during the interview. Checklists were used to probe issues as they arose during the course of the interviews. As already indicated retired eminent educationists such as former college principals, former college inspectors and others were located through snow ball sampling.

It was not very difficult to construct a chain of key informants who were interviewed for the study. These were people who were accessible, willing to talk and were presumed to have great knowledge in the area of teacher education issues due to their experiences in education.

A total of twelve in-depth interviews were conducted involving senior officers from the MoE/TESS, College Principals, officers from CDC, ECZ and some College Lecturers. These officers were purposively selected to provide insights into key issues arising from curriculum innovations in teacher education in Zambia.

The researcher used a checklist in order to cover issues related to curriculum innovations in pre-service primary teacher education in Zambia. The in-depth interviews were also used to cross-check the information obtained through the questionnaires, interviews and FGD. The researcher made efforts to create space for the informants to follow their own line of thinking and thereby providing sometimes unexpected and new perspectives. The interviews lasted between half an hour and one hour.

Analysis of Documents

During field work, the researcher requested for and obtained institutional documents that gave brief histories and activities (programmes) in colleges of education. The MoE HQ, CDC Documentation Centre and Colleges of Education provided such information. In some cases, the information obtained from these documents was used to cross-check the information collected from primary data. Web-based resources, mostly from credible sources like UNESCO and World Bank were also consulted.

Reliability and Validity of the Instruments

Strauss and Cohen (1998) state that the validity of a measure or instrument is described as doing what it is supposed to measure. The instruments used in this study were piloted in September 2008 and their validity established.

The pre-testing of research instruments was done at two colleges of education, one in the Copperbelt Province and the other one in Southern Province involving thirty participants. The participants in the pilot study had the same characteristics as the participants in the actual study. Pre-testing of instruments provided an opportunity to clarify some unclear statements and ambiguous questions.

Following the pre-testing of research instruments, corrections were made and ambiguous questions or statements were rephrased.

Content Validity

Content validity measures the degree to which the various items in the instrument collectively cover the material that the instrument is supposed to cover. The research instruments used in this study were designed and carefully compared to other valid and reliable instruments used in curriculum innovation. The instruments were reviewed by a Professor in Teacher Education at the University of Zambia.

Construct Validity

Construct validity measures how meaningful the scale or instruments are when in practical use. The results of the pilot study helped in determining the initial construct validity of the research instruments.

Data Processing Techniques

The researcher began the process of data analysis during the interviews by recording what was considered relevant to the research questions according to the interview guide.

Patton(1990) proposes two strategies for analyzing interviews: *the case-by-case approach* and the *across-case approach*. In the case-by-case approach, the researcher writes a case study for each person interviewed or each unit studied. Under the across case approach, the researcher puts together answers from different people on common questions or consolidates the different perspectives on a given theme or issue.

Patton adds that although these strategies could be used separately, they are in most cases supplementary.

The across-case approach was employed in this study. In the case of in-depth interviews, the interview guides were used to help the researcher put similar views on a given issue together since the interview guides were structured on the basis of the objectives of the study. The researcher relied more on the across-case analysis whereby questions in the interview guides constituted the central themes. The views of all the participants were then taken and recorded under each of the themes. This process was repeated until all the responses were exhausted.

The across-case approach was also used to analyse responses to the survey questionnaires. Each item in the questionnaire constituted a theme under which all responses to the item were recorded and consolidated until all the responses from all the participants were exhausted.

Where some sub themes emerged, these were first categorized under the main theme and later sub-categorised accordingly. In order to ensure credibility and dependability, the data collected were verified by using triangulation, reflexivity and independent audits.

This was undertaken through member checks by recycling the analysis back to some of the informants and key members of Colleges of Education and Ministry of Education officials such as Principals of Colleges of Education and Teacher Education Officers.

As already indicated qualitative data was analysed through categorization and coding of themes. Descriptive statistics were used in the analysis of quantitative data. Numerical data was summarized using frequency distributions, percentages and graphic presentations in form of charts and tables.

Qualitative research is based on the theoretical and methodological principles of interpretive science. As a result, qualitative analysis contains a minimum of quantitative measurement, standardization and mathematical techniques. Its process brings together collection and analysis of data in such a way that identifying data leads automatically to their analysis, which in turn directs the area in which data should be sought and identified in order to be analysed again. This process leads to the development of new concepts and theories by relating evidence to abstract concepts and to theory generation. In this standard form, analysis is part of data collection and evaluation. While further data are collected analysis continues and evaluation and interpretation follow, and the circular process is repeated until all units have been studied and the research issue is saturated.

For this type of traditional qualitative research, data collection, analysis and evaluation are one and the same process. Nevertheless, for some researchers and a number of studies, qualitative analysis is also performed, in part, after the completion of the collection/analysis stage of the study. In such cases, the result of this collection/analysis process is a large amount of data, that is, qualitative data, which is different from quantitative data. This data appears in words and may have extended text and numbers, the data is also collected in a variety of ways, including observation, interviewing, studying documents and the data is usually processed before use.

In general, qualitative analysis is not as abstract as quantitative analysis, and is not guided by a large body of formal language. During data analysis the researcher searches for patterns of data, for example in the form of recurrent behaviours or events.

When such patterns are identified, the researcher interprets them, moving from description of empirical data to interpretation of meanings.

In summary, qualitative research is characterized by the fact that it is not as standardized and structured as quantitative research. It is interwoven with data collection and employs diverse methods.

Limitations of the Study

There are some threats to the validity of this study which must be taken into consideration when interpreting findings and making conclusions. Although the study consulted widely by sampling six Colleges of Education; officers at Teacher Education Department, Examinations Council of Zambia and Curriculum Development Centre; Civil Society Organisations working in teacher education and eminent educationists familiar with teacher education issues in Zambia, the views of these informants may not be representative. Therefore, generalizations of the findings regarding the impact of curriculum innovations on primary teacher education in Zambia ought to be done with caution.

Questionnaires used in the study may have included concepts that might not have been familiar to participants. Some respondents returned incomplete questionnaires and these were not included in the final analysis. Students in Colleges of Education and serving primary school teachers were not included in the study. The results of the study are therefore, to be interpreted within the context of the study areas and should in no way be taken as a reflection of what would be obtainable in the entire country.

Summary

This chapter has presented the approaches adopted for data collection and data analysis for the study and the basis on which these were selected. The selection was influenced by the need to get a wide range of answers to explain the research problem more clearly and conclusively. It is for this reason that the researcher followed suggestions made by several research methodology experts by using a combination of qualitative and quantitative research techniques. The chapter has also outlined the procedures used to analyze the data gathered from the field and the justification for using the stated procedures.

CHAPTER FIVE

PRESENTATION OF FINDINGS

Overview

This chapter presents the findings of the study. The findings obtained for each of the variables that were investigated are presented separately in tables. In-depth interviews, semi-structured interviews and focus group discussions were held with a wide range of stakeholders involved in or concerned with pre-service primary teacher education. The stakeholders targeted included the following:

- *Officials of the Directorate of TESS in the MoE.*
- *Officials at CDC and ECZ in the Teacher Education Departments.*
- *Principals of Colleges of Education or Vice Principals.*
- *Lecturers in Colleges of Education.*
- *Officials at Teacher Resource Centres.*
- *Civil Society Organisations working in Primary Teacher Education.*
- *Eminent Educationists in Zambia and retired officers who served in the MoE.*

The study collected views from the above respondents pertaining to curriculum innovations in pre-service primary teacher education in Zambia. The questionnaire mainly utilized a Likert response format. The Likert format requested respondents to indicate whether they strongly agreed, agreed, disagreed or strongly disagreed with the statement posed in the questionnaire item. This format was selected because of its ease of understanding to audiences with minimal familiarity with survey research. Neutral choices were eliminated on the basis of the pilot study, as they tended to be over used by

respondents. In order to compensate for the removal of the neutral choices, every effort was made to focus on topics about which the respondents could reasonably be expected to have an opinion. The statements posed in the questionnaire are shown above the tables showing the levels of agreement or disagreement.

With respect to the first specific objective and the first research question, the table below was aimed at finding out the views of respondents about the rate of curriculum innovations in primary teacher education in Zambia.

Table 1: Curriculum Innovations in pre-service primary teacher education in Zambia are too rapid.

Strongly Agree	Agree	Disagree	Strongly Disagree	Non Response	Total
52 (37%)	72 (51.4%)	11 (8%)	3 (2.1%)	2 (1.4%)	140 (100%)

A total of 124 (89%) of the respondents generally agreed that curriculum innovations in pre-service primary teacher education in Zambia were too rapid. Of these 52 (37%) strongly agreed that innovations were too rapid, while 72 (51.4%) agreed that innovations were too rapid.

On the other hand, a total of 14 (10%) of the respondents disagreed with the assertion that curriculum innovations in pre-service primary teacher education in Zambia were too rapid. Of these 2 (2.1%) strongly disagreed while 11 (8%) disagreed. The non-response on this question amounted to 2 (1.4%)

During focus group discussions, most of the respondents strongly felt that the curriculum should be allowed to run a considerable period of time before it is phased out. Others noted that curriculum change in primary teacher education appeared haphazard as there were too many programmes introduced within a short period. Lecturers who had served in Basic Colleges of Education for sometime observed that the Ministry of Education had tried six curriculum innovations since independence, and most of these curricula had been on experimental basis. Some respondents felt that too many programmes were introduced within a short period of time. Others complained that the curriculum changes in primary teacher education were not linked to the school curriculum. “The MoE appears to have too many irons in the fire and colleges are being used as guinea pigs by external funding agencies. It is unprofessional for the MoE to accept anything that comes from external funding agencies,” one of the lecturers complained.

The table below aimed at collecting general views of informants on how they perceived standards in teacher education in the light of curriculum innovations.

Table 2: Curriculum innovations in pre-service primary teacher education in Zambia has improved the standard of graduates in primary colleges of education.

Strongly Agree	Agree	Disagree	Strongly Disagree	Non Response	Total
3 (2.1%)	35 (25%)	73 (52%)	28 (20%)	1 (0.7%)	140 (100%)

A total of 101 (72%) of the respondents generally disagreed with the assertion that curriculum innovations in pre-service primary teacher education in Zambia had improved the standard of graduates in primary colleges of education. Of these 28 (20%) strongly disagreed while 73 (52%) disagreed with the assertion.

On the contrary, a total of 38 (27%) generally agreed with the assertion that curriculum innovation in pre-service primary teacher education in Zambia had improved the standard of graduates in primary colleges of education. Of these 3 (2.1%) strongly agreed while 35 (25%) agreed with the assertion. Only 1 (0.7%) of the respondents did not give their responses on this question.

During focus group discussions, some respondents strongly felt that the performance of the recent graduates from colleges of education was questionable, they felt that teachers were half baked due to insufficient training. They felt that the recent graduates from colleges of education did not demonstrate the required skills and competencies of teachers as compared with those trained under different programmes. “students trained under the recent programmes are an embarrassment in the field, as everyone is commenting on their incompetence including members of the community” one lecturer commented.

Some respondents informed the researcher that members of the community were disappointed with the continuous changes in teacher education. It was also reported that the newly trained teachers had problems fitting in schools upon graduation as there

seemed to be no linkages between the schools and colleges of education in terms of the curriculum, especially subject integration. Some lecturers felt that there was a deterioration of standards in primary colleges of education due to lack of stability of the curriculum. However, some respondents felt that innovations in teacher training had improved teaching strategies as teachers were expected to actively engage pupils during the learning process.

Table 3: There is confusion in schools due to different orientations in teacher training.

Strongly Agree	Agree	Disagree	Strongly Disagree	Non Response	Total
61 (43.6%)	56 (40%)	18 (12.8%)	5 (3.6%)	0	140 (100%)

A total of 117 (83.6%) of the informants generally agreed that there was confusion in primary schools due to different orientations in teacher training. Of these 61 (43.6%) strongly agreed while 18 (12.8%) agreed.

On the other hand, a total of 23 (16.4%) generally disagreed with the assertion that there was confusion in primary schools due to different orientations in teacher training. Of these 5 (3.6%) strongly agreed with the assertion while 18 (12.8%) disagreed.

During focus group discussions, some respondents reported that generations of teachers churned out of colleges under different orientations in teacher education produced

conflicting ideas in schools. Teachers size each other in the schools as everyone feels that they were better trained than others.

It was observed that there was a disconnect between the school curriculum and teacher curriculum and that different approaches in training resulted into problems among teachers.

Table 4: Most of the college lecturers are unhappy with the frequent changes in the pre-service primary teacher education curriculum.

Strongly Agree	Agree	Disagree	Strongly Disagree	Non Response	Total
50 (35.7%)	74 (52.8%)	13 (9.3%)	2 (1.4%)	1 (0.7%)	140 (100%)

A total of 124 (88.5%) of the respondents generally agreed with the assertion that most of the college lecturers were unhappy with the frequent changes in the pre-service primary teacher education curriculum. Of these 50 (35.7%) strongly agreed while 74 (52.8%) agreed. On the other hand, a total of 15 (10.7%) of the respondents disagreed with the assertion that college lecturers were unhappy with the frequent changes in the pre-service teacher education curriculum. Of these 13 (9.3%) disagreed while 2 (1.4%) strongly disagreed with the assertion. Non-response recorded on this question was only 1 (0.7%).

During focus group discussion, it was reported that lecturers had very little time to familiarize themselves with the ever changing curriculum in teacher education. It was further noted that curriculum innovations came with a lot of work for lecturers in terms of

material production for learning. Some lecturers complained of constantly being oriented to new programmes as the curriculum was unstable. However, some lecturers stated that changes in primary teacher education were inevitable as knowledge was in a constant state of flux. “When shall we have a stable curriculum in teacher education, we are always being oriented and re-oriented, when shall we settle down?” asked one of the lecturers.

Some lecturers were unhappy with changing programmes without evaluating existing programmes. It was noted that most of the teacher education programmes introduced in primary colleges of education were on experimental basis and were not evaluated after donor pull-out. It was reported that adhoc changes dampened professional morale of lecturers in colleges of education. Lecturers complained that frequent changes without convincing reasons made teacher education in Zambia unstable and compromised quality of training.

Table 5: College lecturers are not consulted in the curriculum innovation process.

Strongly Agree	Agree	Disagree	Strongly Disagree	Non Response	Total
54 (38.5%)	55 (39.2%)	25 (17.8%)	5 (3.5%)	1 (0.7%)	140 (100%)

A total of 109 (77.8%) of the respondents generally agreed with the assertion that college lecturers were not consulted in the curriculum innovation process. Of these 54 (38.5%) strongly agreed with the assertion while 55 (39.2%) agreed. On the contrary, a total of 30 (21.4%) disagreed with the assertion that college lecturers were not consulted in the

curriculum innovation process. Of these 25 (17.8%) disagreed while 5 (3.5%) strongly disagreed with the assertion. The non-response rate on this question was only 1 (0.7%)

During focus group discussions, some college lecturers hinted that they were taken by surprise by constant changes of the teacher education curriculum. Lecturers reported that sometimes they had tried to resist implementing some of the curriculum innovations.

Lecturers reported that they were only involved in the curriculum process in the final stages to rubber stamp the programme. It was reported that very few lecturers were handpicked to attend orientation workshops for the new curriculum. Some lecturers complained that they were just being used as implementation conduits. It was noted that changes from the Ministry of Education, Directorate of Teacher Education and Specialised Services were just imposed on colleges and that sometimes lecturers who opposed the changes were threatened to be disciplined. It was reported that quite often the MoE did not incorporate the views of lecturers in colleges of education.

It was further reported that the MoE had a tendency of imposing changes on colleges even when they knew that GRZ could not sustain some of the programmes initiated by donor agencies. “Our officers at Teacher Education Department seem not to be learning from the past, because all the donor driven programmes die a natural death when the donors pull out” one of the lecturers commented.

Table 6: Most of the college lecturers do not understand the reasons for curriculum innovations in pre-service primary teacher education in Zambia.

Strongly Agree	Agree	Disagree	Strongly Disagree	Non Response	Total
32 (22.8%)	59 (42.1%)	35 (25%)	12 (8.5%)	2 (1.4%)	140 (100%)

A total of 91 (65%) of the respondents generally agreed with the assertion that most of the college lecturers did not understand the reasons for curriculum innovations in pre-service primary teacher education in Zambia. Of these 32 (22.8%) strongly agreed with the assertion while 59 (42.1%) agreed. On the contrary, a total of 47 (33.5%) disagreed with the assertion that most of the college lecturers did not understand the reasons for curriculum innovations in pre-service primary teacher education in Zambia. Of these 35 (25%) disagreed while 12 (8.5%) strongly disagreed. The non-response amounted to 2 (1.4%).

During focus group discussions, it was reported that college lecturers were not part of the innovation process as the curriculum innovations were initiated by top management in MoE. The rationale for the changes was usually not given by the authorities, but college lecturers were advised to implement the changes. Since college lecturers were not involved in the initial stages, they were always asking questions about constant innovations of the curriculum.

“We are not consulted about innovations in teacher education and we do not know where these changes come from because even some senior officials in the MoE have expressed ignorance about the origins of these changes” commented one lecturer.

On the other hand, some respondents hinted that some lecturers could not understand the international perspectives in teacher education as the world was becoming a global village. It was observed that some changes were insignificant while others looked almost the same. Lecturers had little input in the curriculum. The rationale for the changes were usually vague as some ideas appeared foreign and out of touch with reality.

Table 7: Frequent curriculum innovations in pre-service primary teacher education have contributed to the low standards of teacher education in Zambia.

Strongly Agree	Agree	Disagree	Strongly Agree	Non Response	Total
52 (37.1%)	63 (45%)	15 (10.7%)	10 (7.1%)	0	140 (100%)

A total of 115 (82.1%) of the respondents generally agreed with the assertion that frequent curriculum innovations in pre-service primary teacher education had contributed to the lowering standards of primary teacher education in Zambia. Of these 53 (37.1%) strongly agreed with the assertion while 63 (45%) agreed. On the other hand, it was noted that a total of 25 (17.8%) of the respondents generally disagreed with the assertion. Of these 15 (10.7%) disagreed while 10 (7.1%) strongly disagreed.

During focus group discussions, some respondents reported that the content for most donor driven programmes was shallow and that there was too much concentration on methodology at the expense of content. It was further pointed out that there was little time for lecturers to understand the existing curriculum as changes were implemented before lecturers adapted to the existing curriculum. It was noted that sporadic changes in primary teacher education and inadequate training materials had compromised the standards of training in primary teacher education. “Standards of training have been seriously compromised because nobody seems to be concerned about maintaining standards in teacher education, we do not have time to reflect on our practices due to constant changes” said one lecturer.

It was reported that there was lack of interface between the school curriculum and college curriculum. Therefore, students had problems when they graduated as they found a different subject integration in schools. It was further noted that the period of training was rather short, especially in the case of ZATEC-one year residential course.

Table 8: Which one of the following primary teacher education programmes do you prefer?

Zambia Primary Course(ZPC)	Zambia Basic Education Course(ZBEC)	ZATEC-one year residential course	ZATEC-two Year residential course	Non Response	Total
49 (35%)	37 (26.4%)	5 (3.5%)	48 (34.2%)	1 (0.7%)	140 (100%)

The largest proportion of the respondents 49 (35%) indicated that they preferred the Zambia Primary Course while 48 (34.2%) preferred ZATEC-two year residential programme; 37 (26.4%) preferred the Zambia Basic Education Course (ZBEC) and 5 (3.5%) preferred the ZATEC-one year residential programme. Only 1 (0.7%) did not respond on this question.

During focus group discussions, it was widely held that ZPC was a well designed teacher education programme with adequate time for both content and background. It was further pointed out that ZPC provided a well rounded teacher education programme and was systematic in terms of teacher education. One lecturer said, “ ZPC was a very strong teacher education programme and most of the teachers trained under ZPC worked professionally in the field.”

With regard to the current ZATEC-two year residential course, some respondents felt that this programme would now cover content adequately and address some of the deficiencies observed in the ZATEC-one year residential course. However, some respondents felt that the integration of subjects under this programme would still compromise content for some subjects especially subjects like Industrial Arts, Music, Art, Home Economics and Physical Education.

As for ZATEC-one year residential course, most respondents felt that the course was very shallow in terms of content and that the quality of teachers trained under this programme was half baked.

Some respondents strongly felt that teacher education programmes needed to be strong in both content and pedagogy. ZPC was highly rated because of its elaborate course structure. There were 14 subjects, each subject was handled discrete and there was no subject integration.

Table 9: How do you rate the following teacher education courses in terms of pre-service teacher education in Zambia.

Course	Very Good	Good	Satisfactory	Unsatisfactory	Non Response	Total
ZPC	62(44.2%)	56 (40%)	18 (12.8%)	4 (2.8%)	0	140(100%)
ZBEC	45(32.1%)	77 (55%)	13 (9.2%)	3 (2.1%)	2 (1.4%)	140(100%)
ZATEC One year	03(2.1%)	21 (15%)	62 (44.2%)	46 (32.8%)	8 (5.7%)	140(100%)
ZATEC Two year	38(27.1%)	52(37.1%)	32 (22.8%)	13 (9.2%)	5 (3.5%)	140(100%)

The ZPC was rated as a very good course by most of the respondents 62 (44.2%). This was followed by the ZBEC programme 45 (32.1%). The third in position was the ZATEC two year residential course 38(27.1%). The ZATEC-one year residential course was considered to be the least.

During focus group discussions, some respondents pointed out that the ZATEC-one year residential course was the worst of all teacher education programmes implemented in

Zambia. As for the current ZATEC-two year residential programme, some respondents felt that though the period of training was two years, the integration of subjects would compromise coverage of content in subject areas such as Industrial Arts, Home Economics, Art, Music and Physical Education.

ZBEC was also considered as having been a good programme in teacher education. However, some respondents felt that ZBEC was politicized due to emphasis on Production Units and Political Education. “The only problem with ZBEC was that it was politicized. The UNIP government wanted teachers to work like party cadres. Teachers were expected to support the activities of UNIP as the party was considered as supreme” said one lecturer.

Table 10: Primary Colleges of Education have problems in managing teacher education programmes due to frequent changes in the curriculum.

Strongly Agree	Agree	Disagree	Strongly Disagree	Non Response	Total
52 (37.1%)	63 (45%)	21 (15%)	4 (2.8%)	0	140 (100%)

A total of 115 (82.1%) of the respondents generally agreed with the assertion that primary colleges of education had problems in managing teacher education programmes due to frequent changes in the curriculum. Of these 52 (37.1%) strongly agreed while 63 (45%) agreed. On the other hand, a total of 25 (17.8%) of the respondents generally disagreed with the assertion that primary colleges of education had problems in managing teacher education programmes due to frequent changes in the curriculum. Of these 21 (15%) disagreed while 4 (2.8%) strongly disagreed.

During focus group discussions, some respondents felt that it was quite expensive for the Ministry of Education and Colleges of Education in terms of material production for courses. Others felt that the continuous orientation of college lecturers to new programmes was costly and cumbersome. There was no systematic capacity building of lecturers due to sporadic changes of the curriculum as lecturers were always learning and had no time to conceptualize some of the changes. One lecturer commented that “GRZ / MoE should cut its cloth according to size because some of the programmes adopted by MoE are too ambitious and cannot be sustained by the current meagre funding to teacher education.”

Some lecturers complained about too many uncoordinated programmes in teacher education initiated by co-operating partners in the name of technical assistance. It was noted that some of the technical assistance given to teacher education by foreign experts did not suit the Zambian situation. It was observed that sustainability of some of the innovations was questionable in cases of donor pull-out. Some of the programmes initiated by donors were abandoned once the financiers pulled out.

Some informants noted that materials and facilities for use in the ever changing curriculum were inadequate. Others complained about being kept busy all the time due to frequent changes of the curriculum and inadequate time for relaxation and personal reflection.

Table 11: Curriculum innovations in pre-service primary teacher education have had a negative impact on the colleges of education in Zambia.

Strongly Agree	Agree	Disagree	Strongly Disagree	Non Response	Total
38 (27.1%)	79 (56.4%)	18 (12.8%)	4 (2.8%)	1 (0.7%)	140 (100%)

A total of 117 (83.5%) of the respondents generally agreed with the assertion that curriculum innovations in pre-service primary teacher education have had a negative impact on the colleges of education in Zambia. Of these 38 (27.1%) strongly agreed while 79 (56.4%) of the respondents agreed. On the other hand, a total of 22 (15.7%) of the respondents generally disagreed with the assertion that curriculum innovations in pre-service primary teacher education have had a negative impact on the colleges of education in Zambia. Of these 18 (12.8%) disagreed with the assertion while 4 (2.8%) strongly disagreed with the assertion. The non-response recorded on this question was only 1 (0.7%).

During focus group discussions, some respondents felt that there were getting bored and frustrated with the sporadic changes of the teacher education curriculum. Others felt that some innovations like the ZATEC-one year residential programme had diluted standards of teacher education and produced half baked teachers. It was noted that some retired educationists were wondering what had gone amiss with teacher education in Zambia. The negative impact observed due to constant changes of the curriculum were associated with the shallow content and inadequate time for college-based training, incompetent teachers churned out of colleges of education and the instability of the teacher education

curriculum coupled with inadequate materials and facilities for training. “We are fed up with constant changes of the curriculum in teacher education. The powers that be should consider seriously the way forward otherwise they have wrecked primary teacher education in Zambia,” retorted one of the lecturers.

Table 12: Curriculum innovations in pre-service primary teacher education in Zambia are drawn and implemented in a haste without a solid philosophical foundation.

Strongly Agree	Agree	Disagree	Strongly Disagree	Non Response	Total
68 (45.5%)	59 (42.1)	12 (8.5%)	1 (0.7%)	0	140 (100%)

A total of 127 (90.7%) of the respondents generally agreed with the assertion that the curriculum innovations in pre-service primary teacher education in Zambia were drawn and implemented in a haste without a solid philosophical foundation. Of these 68 (48.5%) of the respondents strongly agreed with the assertion while 59 (42.1%) agreed. On the contrary, 13 (9.2%) of the respondents generally disagreed with the assertion that curriculum innovations in pre-service primary teacher education in Zambia were drawn and implemented in a haste without a solid philosophical foundation. Of these 68 (48.5%) of the respondents strongly agreed with the assertion while 59 (42.1%) agreed.

On the contrary 13 (9.2%) of the respondents generally disagreed with the assertion that curriculum innovations in pre-service primary teacher education in Zambia were drawn and implemented in a haste without a solid philosophical foundation. Of these 12 (8.5%) of the respondents disagreed while 1 (0.7%) of the respondents strongly disagreed.

During focus group interviews, some respondents reported that some programmes in teacher education were designed in a hurry in order to improve the numbers of teachers in the field at the expense of quality. Others noted that the pace of change for curriculum innovations in teacher education in Zambia was too rapid and never gave room to lecturers in colleges for reflection. It was reported that some of the changes were ill conceived and were not informed by research but by the whims of the financiers. It was further observed that some of the programmes imposed on the Colleges of Education by the Ministry of Education and the cooperating partners lacked a solid philosophical foundation as they were out of touch with the Zambian socio-cultural context. It was noted that the piece meal changes in teacher education were detrimental to the training of teachers in Zambia as quality was being compromised. “We are amazed at the way the MoE operates. There are so many educated Zambians at high levels who can give advice, but the MoE only listens to the so called co operating partners who bring foreign ideas,” said one of the lecturers.

Table 13: Curriculum innovations in pre-service primary teacher education are initiated and financed by external agents.

Strongly Agree	Agree	Disagree	Strongly Disagree	Non Response	Total
79 (56.4%)	50 (35.7%)	9 (6.4%)	2 (1.4%)	0	140 (100%)

A total of 129 (92.1%) of the respondents generally agreed with the assertion that curriculum innovations in pre-service primary teacher education were initiated and financed by external agencies. Of these 79 (56.4%) strongly agreed with this assertion and 50 (35.7%) agreed. On the contrary, a total of 11 (7.8%) of the respondents generally disagreed with the assertion that curriculum innovations in pre-service primary teacher education were initiated and financed by external agents. Of these 9 (6.4%) disagreed with this assertion while 2 (1.4%) strongly disagreed.

During the focus group discussions, it was noted that foreign initiated programmes were not sustainable and were out of touch with reality on the ground. Some respondents observed that the dependence of the Ministry of Education on technical assistance to design teacher education programmes should be discouraged as Zambia had a lot of experts in teacher education who would design suitable programmes to fit the Zambian situation. However, some respondents noted that the Ministry of Education appeared to have no capacity to generate home grown curriculum innovations. It was observed that reliance on foreign technical assistance was detrimental to the local situation.

Table 14: Piecemeal curriculum innovations in pre-service primary teacher education in Zambia have not served the desired purposes.

Strongly Agree	Agree	Disagree	Strongly Disagree	Non Response	Total
56 (40%)	69 (49.2%)	14 (10%)	1 (0.7%)	0	140 (100%)

A total of 125 (89.2%) of the respondents generally agreed with the assertion that piecemeal curriculum innovations in pre-service primary teacher education in Zambia had not served the desired purposes as some of the changes looked almost the same. Of these 56 (40%) of the respondents strongly agreed with the statement while 69 (49.2%) agreed. On the contrary, a total of 15 (10.7%) of the respondents generally disagreed with the assertion that piecemeal curriculum innovations in pre-service primary teacher education in Zambia had not served the desired purposes as some of the changes looked almost the same. Of these 14 (10%) disagreed while 1 (0.7%) of the respondents strongly disagreed.

During focus group discussions, it was widely held that some of the innovations initiated by some co-operating partners were aimed at weakening the education system of developing countries so as to keep them in perpetual dependency on the stronger economies. Others noted that the real issues in terms of strengthening the curriculum of teacher education were not addressed. It was further noted that the curriculum was devoid of entrepreneurship skills which were critical for individual development of learners. The rationale of the changes appeared obscure as some of the changes looked almost the same.

Table 15: Curriculum innovations in pre-service primary teacher education have had a positive effect on the primary colleges of education in Zambia.

Strongly Agree	Agree	Disagree	Strongly Disagree	Non Response	Total
0	23 (16.4%)	74 (52.8%)	43 (30.7%)	0	140 (100%)

A total of 23 (16.4%) of the respondents generally agreed with the assertion that curriculum innovations in pre-service teacher education have had a positive effect on the primary colleges of education in Zambia. Of these non of the respondents strongly agreed with this assertion. Only 23 (16.4%) of the respondents agreed with this statement.

On the contrary, a total of 117 (83.5%) of the respondents generally disagreed with the assertion that curriculum innovations in pre-service teacher education have had a positive effect on the primary colleges of education in Zambia.

During the focus group discussions, it was widely held that the curriculum innovations in pre-service teacher education caused a lot of uncertainty among college lecturers and students due to constant changes of the curriculum. The quality of teacher education was being questioned due to the uncoordinated changes and lack of stability of the curriculum.

It was reported that lecturers were always learning without mastering the programmes and that the curriculum was rather overloaded. Some informants were dissatisfied with the quality of teachers produced under these changes.

It was noted that teacher quality was compromised. The mismatch in terms of the college and primary school curriculum posed a lot of problems for students when they graduated as they had to be re-oriented in the schools. Most of the respondents bemoaned the deteriorating standards in teacher education caused by sporadic changes of the curriculum.

What would you like to see with regard to curriculum innovations in pre-service primary teacher education in Zambia.

119 (85%) of the respondents expressed the need to strengthen the subject content and methodologies in teacher education if quality was to be realized. It was noted that sporadic changes of the teacher education curriculum needed to be discouraged and that the Ministry of Education needed to design a suitable local programme using Zambian experts so as to achieve stability and relevance of the teacher education curriculum. It was further reported that any changes in the teacher education curriculum needed to be subjected to broader consultations with all stakeholders in the country.

116 (83%) of the respondents strongly felt that cooperating partners should be viewed as participants rather than determinants. The monitoring and evaluation of teacher education programmes needed to be encouraged in order to generate vital information to foster research based decision making. It was noted that the integration of subjects should be revisited as it had compromised content in certain areas.

It was observed that curriculum innovations should be in line with the available resources so as to avoid ad hoc changes of the curriculum in cases of donor pull-out. Evaluation of teacher education programmes should be done periodically in order to improve the efficiency and effectiveness of the existing programmes.

During focus group discussions, some informants strongly felt that consultations should be done with all major stakeholders before changes are initiated in teacher education. Others felt that there should be strong linkages in the education system starting from Early Childhood Education through to university education. In addition, some respondents felt that curriculum innovations should address practical and entrepreneurship skills. Furthermore, some informants hinted that the experimental curriculum shifts initiated by donor agencies in the name of technical assistance should fit the local situation and that college lecturers should be consulted before any changes are initiated to the existing curriculum. "Evaluation of teacher education programmes ought to be done before embarking on new ones. The MoE should evaluate existing programmes before starting new ones," said one of the lecturers.

Summary

This Chapter has highlighted the views of various stakeholders on curriculum innovations in Pre-service Primary Teacher Education in Zambia. The study found that curriculum innovations in pre-service primary teacher education were too rapid. Most of the respondents interviewed 124 (89%) observed that curriculum innovations in pre-service primary teacher education in Zambia were too rapid.

Most of the respondents strongly felt that the curriculum should be allowed to run a considerable period of time before it is phased out. Others noted that the curriculum change in pre-service primary teacher education appeared haphazard as there were too many programmes introduced within a short period. Most college lecturers and some eminent retired educationists talked to noted that the Ministry of Education had tried six curriculum innovations since independence, and most of these curricula had been on experimental basis. Some respondents felt that too many programmes were introduced within a short period of time. Others complained that the curriculum changes in pre-service primary teacher education were not linked to the school curriculum. It was reported that the newly trained teachers had problems fitting in schools upon graduation as there appeared to be no linkages between the schools and colleges of education in terms of curriculum, especially the element of subject integration.

CHAPTER SIX

DISCUSSION OF FINDINGS

Overview

This chapter discusses the findings of the study. The study investigated the impact of curriculum innovations on pre-service primary teacher education in Zambia. Data were collected on the relevant variables through a self-administered questionnaire, in-depth interviews, semi-structured interviews and focus group discussions.

Most of the respondents 124(89%) observed that curriculum innovations in pre-service primary teacher education in Zambia were too rapid. It was argued that since independence, Zambia had undertaken six curriculum innovations in primary teacher education, namely, Zambia Primary Course (ZPC), Zambia Basic Education Course(ZBEC), Field Based Teacher Training Approach(FIBATTA), Zambia Teacher Education Reform Programme(ZATERP), Zambia Teacher Education Course(ZATEC-one year residential course) and the current Zambia Teacher Education Course(ZATEC-two year residential course). It was noted that most of these curriculum innovations had been on experimental basis without a solid philosophical foundation anchored in research.

127 (91%) of the respondents noted that frequent and sporadic changes in primary teacher education needed to be discouraged. It was pointed out that once a fully thought out programme of training was in place, it should be allowed to run a reasonable length of time and any changes in the programme should be made only after a rigorous

evaluation of its effectiveness. This argument is supported by Gatawa (1994) who notes that curriculum change is not a neat and easy process. There is always the question of cost. Therefore, it is important to weigh the cost of curriculum change against other legitimate claims on the national economy. Curriculum innovations tends to be more expensive than the programmes they replace, because of the cost of research, development of materials and re-education of personnel.

Curriculum change is also constrained by the variable of time. Immediate change is sometimes impossible because of the need for long term planning. Mort in Bishop(1985) contends that it takes about fifty years for a good idea in education to be generally accepted and another fifty years for it to be implemented, by which time it is obsolete, or it has vanished in a cloud of good intentions. As an example, the concept of the comprehensive school was suggested in Sweden in the 1880's. But it was not until the 1930's that the educational change was finally put into practice.

Hawes (1979) notes that trying to achieve too much, too fast, can have the opposite result. He describes "The New Primary Approach" to English Teaching in Kenya derived from a research project carried out in 25 Asian schools in Nairobi. The extension went too far and too fast. The time available for in-service training was reduced drastically. This resulted into supervision arrangements breaking down and they were pained complaints about pseudo-literacy or even illiteracy in the upper classes (Hawes,1979).

Sometimes the planned change may be just too ambitious at that point in the country's development. It was in 1967 that Tanzania adopted the policy of Education for Self-Reliance, but they never succeeded in making all the changes they had intended in their educational system.

Setijach (1982) notes that radical changes without sufficient time for preparation have often proved more harmful than useful. The practice itself is more like using slogans and changing names than actually changing substances. Courses can be added and deleted in practically no time, however, teacher and student practices may not change at all in the process.

On whether curriculum innovations in pre-service primary teacher education in Zambia had improved the standards of graduates or not in primary colleges of education, most of the respondents 101 (72%) generally disagreed with the statement.

Some respondents strongly felt that some curriculum innovations in teacher education had watered down standards of teacher education in Zambia. It was widely held that something had gone amiss in teacher education as the recent graduates churned out of colleges of education appeared ill equipped and were regarded inept.

During focus group discussions, some respondents informed the researcher that some members of the community were disgusted with the rapid changes in teacher education. It was argued that students were half baked in the colleges due to insufficient training.

It was noted that some of the changes did not add any value to teacher education as student teachers did not demonstrate the required skills and competencies in teaching. Therefore, most of the college lecturers never appreciated the constant changes of the curriculum. However, a few respondents argued that some of the curriculum innovations had broken down some traditions, especially those to do with teacher-pupil interaction. The classroom which was regarded as a black box by some teachers was now an open place for learning and exchange of ideas.

It has been argued that teachers must be trained not only in the techniques of teaching young people but also in adult education and group dynamics. Teachers also require deep understanding of the main social, political and economic problems of their countries and the role which education can play in alleviating some of the problems (Bishop, 1985).

It has been observed that in many developing countries the role of the teacher is changing, especially in primary schools from being only a teacher of the 3Rs to one of community worker and change agent. Instead of being an encyclopaedic “Mr know-all,” a transmitter of knowledge, a contemporary teacher should be a creator of desirable learning situation, helping his pupils to gain entry into the commonwealth of knowledge. Lawton (1989) contends that the teacher-pupil relationship should be more of a collaborative learning experience, based on mutual respect rather than domination. In the past the basic entry of the teacher was to teach the 3Rs and some additional factual knowledge. Teacher educators and members of the community need to appreciate the multifarious roles of a teacher in modern society.

On the assertion that there was confusion in schools due to different orientations in teacher training, the largest proportion of the respondents 117 (83.6%) generally agreed with this statement.

During focus group discussions, some respondents observed that teachers trained under different programmes did not speak the same language. The newly trained teachers from Colleges of Education regarded the old teachers as old fashioned. Teachers trained under the Zambia Primary Course (ZPC) and the Zambia Basic Education Course (ZBEC) were generally perceived as old fashioned by the young teachers trained under ZATERP and ZATEC. Similarly, teachers trained under ZPC and ZBEC regarded the young teachers trained under ZATERP and ZATEC as half baked teachers.

It was reported during focus group discussions that some veteran teachers were not comfortable to leave a class in the hands of a ZATEC trained teacher. Members of the community appeared to have regard for the old timers rather than the new teachers. The reported confusion in schools appeared to hinge on different orientations received during training. Under ZPC and ZBEC each subject was taught discrete, there was no integration of subjects and the learning was more of teacher centred type of instruction whereas under ZATERP and ZATEC, the element of subject integration was introduced. The fourteen subjects were collapsed in the six study areas. This integration and team teaching is said to have compromised the content of subjects.

The perceived confusion in schools is partly caused by the lack of harmonization of the school and college curriculum and lack of stability of the teacher education curriculum. The generations of teachers trained under different methodologies is said to be producing conflicting ideas in schools.

The task of curriculum innovation and implementation involves changing the attitudes of people. Writing about curriculum innovations in primary education Griffiths (1978) observes that parents as elsewhere in the world are concerned with success in examinations. They are likely to be suspicious of change, particularly when it involves their children spending time in scientific experiments, making things, drawing and visiting places. The new teacher education programme appear to place emphasis on constructivist approaches to learning involving discovery, inquiry and learning by doing. These approaches are seen as time wasters.

Change is a long drawn-out process which begins in the minds of people. An innovation that is at odds with existing values and practices certainly encounters initial difficulties. With regard to most of the college lecturers being unhappy with the frequent changes in the pre-service primary teacher education curriculum, a total of 124 (88.5%) of the respondents generally agreed with the statement.

It was noted that constant curriculum innovations in teacher education had dampened the morale of lecturers in colleges as the changes came with a lot of work in terms of material production for students.

It was argued that curriculum innovations were being imposed on colleges and lecturers in colleges had no choice but to accept whatever was coming from the higher offices even when they had divergent views. It was further reported that lecturers had little time to familiarize themselves with the ever changing curriculum.

During focus group discussions, some lecturers expressed displeasure with regard to changing teacher education programmes without evaluating existing programmes. It was reported that most of the curriculum innovations in teacher education were on experimental basis and were being initiated by co-operating partners. In the light of these sentiments, most lecturers argued that curriculum change in colleges of education could only succeed if college lecturers were fully involved in the innovations and sufficiently impressed by the validity of the new approaches being introduced. They also pointed out that lecturers needed to be thoroughly grounded in the techniques necessary for its implementation. Therefore, for curriculum innovations to be meaningful in teacher education, college lecturers should be incorporated in the innovation process.

On college lecturers not being consulted in the curriculum innovation process, a total of 109 (77.8%) of the college lecturers interviewed generally agreed with the assertion that college lecturers were not consulted in the curriculum innovation process.

During focus group discussions, it was reported that college lecturers were taken by surprise by the constant changes of the teacher education curriculum. It was noted that quite often college lecturers were only involved in the curriculum process in the final

stages of the curriculum innovation process so that they could rubber stamp the programme. Some lecturers complained that they were being used as implementation conduits as the innovations were usually initiated by top management at MoE HQ and imposed on the colleges. In addition, it was reported that sometimes lecturers had resisted to implement some of the innovations in teacher education. Lecturers who were opposed to implementing new ideas were often reprimanded and threatened with disciplinary action or cited for insubordination. Some lecturers talked to complained that once top management of the MoE had decided on changes, they did not accommodate divergent views coming junior officers.

On the contrary, a total of 30 (21.4%) of the respondents generally disagreed with the assertion that college lecturers were not consulted in the curriculum innovation process. Some respondents reported that in some cases, lecturers were informed about the changes and that only a few lecturers were incorporated in the innovation process. However, it was stated that consultations with college lecturers was usually popular in the final stages of the curriculum innovation process. It was argued that curriculum innovations in teacher education were initiated by co-operating partners in the name of technical assistance to Zambia. However, it was observed that some of the foreign ideas were not beneficial to the *Zambian* situation.

Bishop (1985) contends that the teacher is the key to educational innovation. Whether an innovation succeeds, takes root, depends in the long run on the teacher. Specialists and experts may select the objectives and plan the general advance, but it is the teacher in the class who are the implementors. Similarly, no genuine innovation may occur in primary colleges of education unless the lecturers are personally committed to ensuring its success. Curriculum innovations should start at the lecturer's level. In the final analysis, it is the lecturer who has to operationalise on the innovation at the classroom level.

Howson (1982) points out that a curriculum is only as good as the quality of its teachers. Positively, a curriculum is enriched by the creativity and imagination of good teachers; negatively it is vitiated by the limitations of poor teachers and ineffective teacher training. Therefore, involvement of college lecturers in curriculum innovations is crucial. Success in teacher education cannot be scored without the full co-operation of college lecturers. Teacher educator's skills and attitudes are more vital in curriculum innovations than changes in content and methodology.

Curriculum innovations should involve the college lecturers for they know the local situation. Unless college lecturers are available and willing to participate in the curriculum development, there is no future for it. It is for this reason that college lecturers should be fully involved in the curriculum innovation process and their involvement must be genuine, not just a matter of their being told what to do and why, but a proper participation in planning and decisions.

There should be cordial exchange of ideas between all those working on new programmes instead of the arrogant “we –know-what’s good-for you” attitude. The college lecturers should be consulted rather than told what to do, they should be respected rather than patronized.

In support of this argument, Obanya (1984) describes the “hostile” reaction of Nigerian teachers to a new French Language syllabus. The West African Examinations Council introduced a new syllabus for the School Certificate Examinations in French. The syllabus was considered revolutionary in its shift from a stress on literacy to one on oracy. However, the syllabus was not received well. This reaction was not due to any shift in emphasis. Obanya hinted that “initial hostile” reaction to the new French syllabus was due to a failure on the part of the innovators to ensure adequate participation by school teachers during the planning stages.

On the assertion that most of the college lecturers never understood the reasons for curriculum innovations in pre-service primary teacher education in Zambia, a total of 91 (65%) of the respondents generally agreed with this statement while 47 (33.5%) disagreed. It was widely held that college lecturers were not part of the curriculum innovation process and therefore never understood the rationale for constant curriculum innovations in primary teacher education.

Fafunwa (1977) points out that if teachers are not fully involved in the process of educational change then they may not understand the principles behind and the reason for

change. Curriculum innovations in colleges of education could only occur more realistically and more effectively when college lecturers are fully integrated in the process of change. To be fully involved in the curriculum innovation process entails that they must be fully oriented as to the whys and wherefores of the change.

Fafunwa (1977) further argues that not only should the teacher understand the reasons behind the change or innovation but must fully appreciate the philosophy underlying the innovation. For instance, if the intention is to introduce more discovery/enquiry oriented teaching and learning in the classroom, the teacher must fully comprehend the rationale behind the methodology. According to Fafunwa (1977), no change in practice and no change in the curriculum has any meaning unless the teacher understood it and accepted it. On the other hand, Howson (1982) has observed that many teachers often lack the necessary skills and knowledge to carry out an innovation. Therefore, they are understandably reluctant to break new ground.

On the statement that frequent curriculum innovations in pre-service primary teacher education have contributed to the lowering standards of teacher education in Zambia, a total of 115 (82.1%) of the respondents generally agreed with this statement while a total of 25 (17.8%) of the respondents disagreed.

During focus group discussions most of the respondents argued that the content of the teacher education had been watered down due to subject integration. During ZPC and ZBEC, there used to be 14 subjects on the teacher education course and each of these

subjects was taught as a discrete subject. The curriculum innovations that started in the late 1990's and 2000 collapsed these subjects into six study areas. In addition, the depth in terms of content for some subjects was adversely affected. The subject integration brought in the aspect of team teaching and team planning. For example, Expressive Arts comprised three subjects viz, Physical Education, Art and Design and Music. During lectures all the three subject areas were integrated in the topic that was to be presented, and all the three lecturers were to be present in the lecture room and each lecturer was required to handle a given component during the lecture. As for Technology Studies, this study area combined Industrial Arts and Home Economics. This integration compromised subject content in some of the subjects. It was assumed that all student teachers studied these subjects at High School before getting into college. It was observed that only students who attended technical schools had enough background in Industrial Arts comprising Wood Work, Metal Work and Technical Drawing.

The Literacy and Language Education comprised the teaching of Literacy and Languages. English Language and the Zambian Languages were taught in this study area. The integration of subjects here seemed to work well although the orthography of Zambian Languages was different from that of the English Language.

The Education and Professional Study area consisted of Educational Psychology, Sociology and Special education. These subjects were integrated. The teaching of these subjects was not problematic apart from the teaching of Audio Visual Aids which was completely misplaced. The content of this subject was not taught the way it was handled

in the ZPC and ZBEC. This knowledge gap was only identified when students were doing the school-based year (practical teaching). It was noted that most of the students had problems in making and using Audio-Visual Aids and in writing on the chalkboard, and teaching handwriting skills at the lower basic.

The Mathematics and Science Education study area comprised the teaching of Mathematics, Environmental Science and Agricultural Science. This integration did not have serious problems, however, it was noted that the Mathematics component had its content diluted due to the integration. It was suggested that Mathematics should stand on its own as a study area and that all sciences were to be covered in the Science study area. This recommendation was only implemented a few months before the phasing out of the ZATEC –one year residential programme.

The Spiritual, Social and Moral Education combined the teaching of disciplines such as Social studies, Geography, History, Civics and Religious Education. Some informants observed that the integration watered down the content in some of the subjects that required much more emphasis than what was coming out in an integrated fashion. In addition, some lecturers who had inadequate backgrounds in other subjects in this study area had problems in handling some of the topics on the syllabus. Richard Livingstone in Musgrove (1973) writing on the integrated curriculum argues that:

any good education must be narrow...Education prospers by economy, by exclusion.” He further argues that “overcrowding, in education as in housing meant ill health, and turned the schools into intellectual slums”. He stated that “a good teacher was known by the number of subjects he refused to teach.

Similarly, Whitehead in Musgrove (1973) had said much the same and for similar reasons. Whitehead contends that “mankind is naturally a specialist... wherever you exclude specialism you destroy life” Whitehead’s first educational commandment was “Do not teach too many subjects”. Similarly, the Spens Report on Secondary Education and the Norwood Report on Curriculum and Examinations reported similar views, Musgrove (1973). Both reports maintained that each subject had its distinctive individuality and represented a unique intellectual tradition. Therefore, subjects should not be unified or otherwise fused. The Norwood Report examined the concepts of an “integrated” and a “ balanced” curriculum but found them largely meaningless.

Musgrove refers to specialization as the power base of the curriculum. According to Musgrove specialization means neither intellectual fragmentation nor organizational anarchy (Musgrove, 1973). In other words, teachers can cooperate without losing their subject identities and without being denied a strong departmental base. Whenever subjects are to be integrated, the departmental base is threatened. According to Musgrove (1973) only one person wins when you integrate subjects and dissolve departments, the person who wins is the one at the top.

Some eminent educationists interviewed hinted that curriculum innovations should not take place in a vacuum. Curriculum change must be predicated on a sound philosophy of education. Trying to achieve too much, too fast can have the opposite result.

Hawes (1979) describes such a case thus: The “New Primary Approach” (to teaching English) in Kenya which was derived from a research project carried out in 25 Asian schools in Nairobi...The extension went too far too fast. The time available for in-service training was cut short again and again. Supervision arrangements broke down. There were several complaints in the upper classes.

Respondents were asked to rate primary teacher education programmes according to their preferences. 62(44.2%) rated the ZPC as a very good course. While 45 (32.1%) rated the ZBEC programme as very good course. Only 3 (2.1%) rated the ZATEC-one year residential course as a very good course. 38 (27.1%) rated the ZATEC –two year residential programme as a very good course.

In terms of dissatisfaction, the majority of respondents 46 (32.8%) rated the ZATEC-one year residential course as unsatisfactory, while, 13 (9.2%) rated the ZATEC –two year residential course as unsatisfactory. Only 3 (2.1%) rated the ZBEC programme as unsatisfactory and 4 (2.8%) rated the ZPC programme as unsatisfactory.

The largest proportion of the respondents rated the ZPC as a very good course. This was followed by the ZBEC programme. The third in position was the ZATEC-two year residential programme. The least considered programme was the ZATEC-one year residential programme.

It was reported during focus group discussions that a lot of people were disappointed with some teacher education programmes implemented in Colleges of Education, especially in recent years. ZATEC-one year residential programme was said to be very unpopular in schools and communities. It was observed that the quality of ZATEC teachers was substandard and that some teachers never wanted to give their classes to ZATEC trained teachers.

Reimers (2003) notes that the first step in any process of developing a professional in any field is the initial professional preparation of that person. In teaching, this preparation takes very different shapes and forms and varies dramatically from country to country. Caldehead and Shorrocks (1997) noted different conceptual orientations about the role of teachers and how their preparations have shaped the nature of the initial preparation of teachers. They describe five orientations to teacher education, viz; the academic orientation which emphasizes teacher's subject expertise and sees the quality of the teacher's own education as their professional strength.

The practical orientation emphasizes the artistry and classroom technique of the teacher. The key ingredient in this orientation is the practical experiences in the classroom, and the apprenticeship model of preparation.

The technical orientation emphasizes the knowledge and behavioural skills that teachers require while the personal orientation emphasizes the importance of interpersonal relationships in the classroom and considers learning to teach as a process of becoming

inspired in the humanistic approach to psychology. The critical inquiry orientation promotes the development of critical and reflective practices in teachers so that they can become agents of social change.

Similarly, Ben-Peretz (1995) points out that pre-service teacher education varies dramatically around the world in such aspects as institutional context, content areas, time allocation and forms of practical experiences for the students. Although many societies consider pre-service teacher education to be the only professional preparation teachers will receive throughout their careers, the current tendency is to acknowledge that this is merely the first step in a longer process of professional development. It is well documented that during initial training and their first few years in the classroom many teachers experience difficulties in learning to teach (Calderhead and Sharrock, 1997) and thus, most educators are advocating for more support to expand the conception of teacher preparation and professional development, which does not necessarily imply more years of pre-service or initial education.

On the assertion that *Primary Colleges of Education have problems in managing teacher education programmes due to frequent changes in the curriculum*, the largest proportion of respondents generally agreed with this statement. It was reported that constant changes of the teacher education curriculum was expensive for both the MoE and Colleges of Education in terms of material production for new programmes. The continuous orientation of college lecturers in terms of re-orientation was somewhat tedious.

Most of the respondents felt that there was no systematic capacity building of lecturers due to sporadic changes of the teacher education curriculum as college lecturers were always learning and had little or no time for personal reflection.

It was observed that some changes of the teacher education programmes or innovations initiated by co-operating partners were abandoned when the financiers pulled out. It was noted that the MoE should avoid sporadic changes of the teacher education curriculum as it was not adding value to the quality of teacher education in Zambia. ZATEC is a case in point. Colleges had to grapple with raising funds to pay lecturers for monitoring students in the field when the financiers pulled out. The students were no longer entitled to an allowance every term as funds were no longer available due to donor pull out.

Beatty (1998) and Clarke (2000) have pointed out that the professional development of teacher-educators is an aspect of professional development that has been neglected, despite many reports that show its importance in the improvement of the professional development of all teachers.

Clarke (2000) notes that the professional development of teacher-educators and other educators in higher-education institutions does not differ greatly from that of elementary and high school teachers. They need to acquire professional knowledge, not only of subject matter, but also of pedagogy (and that it is the latter which is usually weak among higher education teachers). Teacher-educators must develop skills and techniques for teaching (something that cannot be “taught” directly, but that can be promoted and

developed with guided practice. They must develop attitudes and understanding of ethical principles that underlie teaching (Beatty, 1998).

The frequent changes of the curriculum does not enable college lecturers to develop professional knowledge and pedagogy effectively.

On the assertion that *curriculum innovations in pre-service primary teacher education have had a negative impact on the colleges of education in Zambia*, a total of 117 (83.5%) of the respondents agreed with this statement while a total of 22 (15.7%) disagreed. It was reported that some college lecturers were bored and frustrated with the sporadic changes of the teacher education curriculum. The largest proportion of the respondents felt that some innovations like ZATEC-one year residential programme had watered down standards of teacher education and produced incompetent teachers.

Some retired educationists expressed their disappointment with the recent curriculum innovations in teacher education. The negative impact of the curriculum innovations has been observed in terms of inefficiency in professional knowledge and subject content.

Mutua (1995) argues that the whole question of education cannot be considered without considering the prime mover of that education who is the teacher. Whatever other facilities and resources are allocated in this sector of human development, the teacher continues to play a crucial role in determining how this sector is developed.

According to Mutua (1995), a teacher is not merely a purveyor of knowledge and skills; s/he is many things to many people but basically is considered in relation to his pupils. This clearly indicates the very close relationship between the teacher and the pupil to the extent that the teacher is considered to be in loco parentis to his / her pupils. Just like the real parent, the teacher imparts knowledge but at the same time influences pupils changing or forming behavioural patterns. This is particularly so in formative stages of primary teaching.

Teaching is not just a process of imparting knowledge and skills. It is also a process of changing or forming attitudes and behaviour. The teacher then becomes a facilitator to learning. The technical word given to this process is pedagogy. It is expected that one of the major roles of a teacher is the production of a well rounded, well-integrated individuals capable of playing a positive role in the society.

On the statement that *Curriculum Innovations in pre-service primary teacher education in Zambia are drawn and implemented in a haste without a solid philosophical foundation*, a total of 127 (90.7%) of the respondents generally agreed with this assertion whereas only 13 (9.2%) of the respondents disagreed.

It was reported that some programmes in teacher education were designed and implemented in a hurry by external funding agencies in the name of technical assistance. However, it was noted that the nature of technical assistance that was given in teacher education was not anchored in research and was to a large extent not suitable for the local conditions of the Zambian education system.

The issue of curriculum change can also be approached from a critical or radical angle. Such an analysis centres on a question sparked off by the built –in prescriptions of projects funded by outsiders. The question is “whose interests are served by the changed curriculum? (Zachariah, 1985:12).

Regardless of the theoretical approach to curriculum change, the degree to which curriculum is rooted in the context or situation is widely acknowledged today as being influenced by either political or economic reasons.

According to Verspoor (1989), two main processes are at the origins of change programmes; political factors and the availability of external funding. Weiler(1982) mentions three similar external influences on educational planning in third world countries, i.e, the economic and political dependency of many of these countries, problems of external funding, and the international (prescriptive) model of educational planning. All these political, economic and educational contextual factors are generally the rationale behind large scale curriculum reforms and reconstruction in Africa.

Political and economic factors have played a profound role in restructuring education systems and curricula in most African countries. The basic assumption is that formal schooling and non-formal educational programmes could function as agents of social change in most developing countries (Fagerlind and Saha 1989:32; Torres 1990:97).

Apart from educational and curriculum changes with the principle emphasis on social transformation, agencies such as the World Bank have also become involved in formal and non-formal educational programmes in developing countries. The prevailing views on modernization assumed that investment in the education of a nation (i.e. human resource) would contribute more to long-term sustainable economic growth of a country than capital, natural or material resources (Lulat 1982:235) and Rondinelli et al 1990:4). This view was also known as the human capital theory and represented the belief that the third world would be economically developed along similar lines as Europe had been developed. However, financial international agencies have tended to try to implement their own preferences in terms of curriculum innovations instead of taking or receiving the country's considerations (Weiler1982:117). Educational development initiatives implemented by most international financial agencies have often been combined with curricular changes which are considered as one of the major instruments for improving the quality of education (Verspoor 1989: Coombs 1985:114).

Many educational reform and reconstruction efforts in third world countries are centrally managed and tend to be a complex "bundle of innovations" (Verspoor, 1989:132) which include curriculum changes as one of the main objectives of innovation. Reasons for this include the countries colonial heritage of central control and the aspiration towards nation building and national development objectives (Verspoor 1989:132 and Rondinelli et al 1990:120). The pace of curriculum innovation in primary teacher education in Zambia has been quite rapid beginning in the mid 1990's to the turn of the century.

The reasons for some of the changes are only known by the international financial institutions providing support to Zambia.

On the statement that *Curriculum innovations in pre-service primary teacher education in Zambia are initiated and financed by external agents*, a total of 129 (92.1%) of the respondents generally agreed with the assertion that curriculum innovations in teacher education were initiated and financed by external agents. On the other hand, 11 (7.8%) disagreed with the assertion. The displacement of the Teacher Training Inspectorate (TTI) and preference for another structure during ZATERP and ZATEC funded by DANIDA exemplifies the struggle between the local and donor interests. In some cases, some dissatisfaction expressed about curriculum innovations initiated by the donor community may not be appreciated by the locals. What may be disliked may not necessarily be their ideas but missed opportunities to be part of the donor funded project. Membership to a donor funded project opens opportunities for more privileges and access to better facilities and monetary gains. Therefore, the socio-politics of these innovations sometimes take on an economic dimension. Some retired teacher training inspectors talked to revealed that they were not consulted about ZATERP. The MoE and DANIDA formed a parallel structure at teacher education when the teacher training inspectors showed some resistance about the proposed changes. The Teacher Training Inspectorate (TTI) felt that they had been treated unfairly because there were in charge of the colleges and yet there were not involved in the activities that were carried out under the ZATERP programme. It was a situation of “We” and “Them” as it was believed that the DANIDA officials were initially arrogant to local ideas (Musonda, 2005).

Some eminent educationists interviewed argued that the pace of implementation of curriculum innovations in teacher education were hurried. State control and imposition of educational change is not a new phenomenon in most African countries. Skies (1990) points out that there is nothing new about educational change. What is new was the rate and frequency with which changes were introduced and imposed through government departments under the influence of international lending institutions.

The recent curriculum innovations in primary teacher education portrays a case of a policy driven reform formulated without adequate consultations with practitioners. Some officers at TESS admitted that ZATERP and ZATEC had been hastily prepared innovations. Their argument was that policy changes were made at very high levels, it was a political agenda, therefore, TESS was compelled to fulfill what was pledged to cabinet. Sarason (1971) in her study found out that haste was one of the most frequent causes of difficulty in implementing change because some people were impatient and never wanted to listen to divergent views.

Some lecturers talked to reported that they had pointed out some deficiencies in ZATERP and ZATEC, but senior officers from the MoE could not take their views, instead some college lecturers were even reprimanded for going against the views of the MoE. Others were told to resign if they did not want to accept change.

This hasty decision resulted in low morale of some college lecturers because they had no choice but to begin to adapt to the changes imposed upon them.

Even though some college lecturers accepted changes in teacher education, they felt marginalized by the consultation process, which they saw as rubber stamping. It has been observed that wherever curriculum innovations are initiated by the MoE, they are brought as policy packages already decided upon by the MoE and the funding agency. Such educational changes are viewed as political because the shifts in the curriculum do not give chance to practitioners to decide their professional destiny. Such centrally prescribed policy driven changes without flexibility and sensitivity to the practitioner's professional views are usually not well received by local stake holders. On assertion that *piece meal curriculum innovations in pre-service primary teacher education have not served the desired purposes as some of the changes almost look the same*, most of the informants interviewed 125 (89.2%) agreed that piece meal curriculum innovations in pre-service teacher education in Zambia had not served the desired purposes as some of the changes looked the same.

Some retired educationists interviewed argued that some of the innovations initiated by some co-operating partners were aimed at weakening the education system of African countries in order to perpetuate the dependency syndrome. It was strongly argued that the curriculum innovations of the late 1990's up to the turn of the century did not add value to teacher education in the country.

Some college lecturers and college administrators reported that curriculum innovations in pre-service teacher education caused a lot of uncertainty among college lecturers and students due to sporadic changes. It was argued that the quality of teacher education was compromised due to the uncoordinated changes and lack of stability of the teacher education curriculum.

Most of the respondents were disappointed with the quality of teachers churned out of the colleges. It was noted that teacher quality had deteriorated due to frequent shifts in teacher education curriculum. It was noted that the mismatch of the college curriculum and the basic school curriculum posed a lot of problems for student teachers when they graduated from colleges as they had to be re-oriented.

Some informants talked to about what they wanted to see with regard to curriculum innovations in pre-service teacher education in Zambia indicated that it was important for the MoE through TESS to design an indigenous teacher education programme which would be tailored towards the needs of basic education. A programme that could be financed using local resources ensuring issues of sustainability and relevance. It was strongly felt that MoE should avoid short-lived donor driven programmes, it was argued that donors should be seen as participants rather than determinants in the process of curriculum reform. Some informants felt that it was important to strengthen teacher education programmes in terms of content and methods. Others felt that well qualified candidates should be recruited in colleges for training and college lecturers should have a minimum qualification of a first degree.

It was noted that some candidates coming for training were weak candidates who could not be accepted elsewhere but were taking teaching as their last resort.

On the involvement of college lecturers in the curriculum making process, lecturers in colleges of education have tended to be passive consumers of curricular materials churned out by centres divorced from them. Theirs is a purely user role. They have been conditioned to regard curriculum politics as a “sacred goat”- a responsibility of arm chair theorists. Curriculum development in Zambia is seen as a preserve of theorists who are removed from the chalk dust of the classroom. The role of lecturers in colleges of education has been confined to mere interpretation and implementation of syllabi.

Lecturers in colleges of education should be involved in curriculum development because they are the main actors in the curriculum. They play a decisive and crucial role. On their own, curriculum documents are mere paper programmes. Their effect depends entirely on teachers. It is lecturers who activate them into practical classroom activities. The attitudes, qualifications and experience of teachers will decide to a very significant extent, the success and failure of any curriculum.

Genuine curriculum change in colleges of education can only occur if college lecturers are personally committed to ensuring its success. Unless this commitment occurs, new methods and materials may eventually be permanently relegated to store rooms or used only in an unsystematic manner.

The “grassroots” approach, which gives teachers initiative, should replace or, at least be combined with the “top-down” administrative approach which reduces teachers to passive recipients of curriculum materials.

If curriculum changes are initiated and directed by a small group, the chances are that the change may not reach the classroom which is the fundamental arena for curriculum changes. Changes in curriculum approach, content and method take place only when there are changes in thinking of those who are concerned, particularly the college lecturers in this case. Changing the curriculum involves changing individuals. In addition to changing attitudes, the college lecturers should be taught the new skills necessary to cope with the different responsibilities brought by the changes.

There has been undue reliance in the *Zambian* education system on the *power - coercive strategy* on curriculum innovation. This strategy is top-down in nature. Power is used as the ultimate sanction. Participants are just told to adopt an innovation and resistance is not tolerated or else sanctions are carried out against those who may try to resist change. It is important to combine this model with the *problem-solving* and the *Social Interaction Models* which significantly involve important stake holders such as teachers and college lecturers at all stages of curriculum development. In this regard a partnership should exist between college lecturers and curriculum developers. College lecturers should be consulted and invited to contribute to the process of planning and developing the teacher education curriculum. They should not be invited towards the end of the curriculum making process to rubber stamp the changes.

Curriculum development is a multi-faceted enterprise and the nature of teacher preparation depends on the nature of the work to be done. Important, however, is the creation of a structure which facilitates preparation. Situations where the majority of members of curriculum change teams are university dons and education officers are unhealthy. It is college lecturers or teachers who have to live with decisions taken by these teams and it is only proper that they constitute the majority. A common mistake is that of regarding education officers as teacher representatives. Education officers or university dons cannot be substitutes for teachers or college lecturers. Their concerns are often different from those of teachers. In fact, they are outsiders who may not have direct contact with issues that confront college lecturers in this case. Only college lecturers can meaningfully represent themselves on curriculum panels. Participation of important stakeholders such as teachers and college lecturers should also be extended to the areas of research and evaluation. Curriculum evaluation is another area where outside professionals are often contracted. In most cases, they conduct summative evaluation. Like a post mortem, summative evaluation does not save the patient. It explains an accomplished fact. Curriculum developers want to know how their products are performing in the user area. They want information on difficulties being experienced by teachers and pupils. This inside information is best provided by the teachers who are directly involved in implementing the curriculum.

The path to full participation in curriculum development by college lecturers has many obstacles. They range from problems created by college lecturers themselves to those stemming from long standing traditions. Lecturers in Basic Colleges of Education comprise a mixed bag qualified professionals. Their preparedness for active involvement in curriculum decision-making is similarly different. Only a fraction of college lecturers would be able to make a meaningful contribution to curriculum decisions.

The quality of teacher educators is not the only significant variable. Attitudes are equally important. Generally teachers are conservative and docile. Whatever their qualifications, they tend to restrict their domain of operations to the classroom. Programmes that involve them in activities outside the classroom are frowned upon. The classroom is their castle. They build defences around it and block communication with the outside. Attempts to penetrate the classroom, even with the noble intention of evaluating the performance of curriculum materials are regarded as interference. There is also lack of institutional encouragement for college lecturer's participation in curriculum development. Principals tend to be concerned solely with the smooth flow of their time tables. Little or no provision is made for college lecturers to engage in curriculum design activities.

There is also the ideological-political orientation. Hence, it attracts the active interest of politicians and governments. It is considered too sensitive to be left to teachers or college lecturers. As a result, elaborate guidelines are produced for teachers which leave no room for significant individual teacher enterprise.

Summary

This Chapter has discussed some key lessons learned on initial teacher preparation.

Beginning teachers need initial preparation in their subject matter, knowledge of how to use instructional materials, and some basic classroom management and reflection skills.

Most of the respondents interviewed strongly felt that some curriculum innovations in teacher education had watered down standards of teacher education in Zambia. It was widely held that something had gone amiss in teacher education as the recent graduates churned out of colleges of education were ill equipped and were regarded inept.

Some respondents informed the researcher that some members of the community were disgusted with the rapid changes in teacher education. It was argued that students were half baked in the colleges due to insufficient training. It was noted that some of the changes did not add any value to teacher education as student teachers did not demonstrate the required skills and competencies in teaching. It was noted that constant curriculum innovations in teacher education had dampened the morale of lecturers in colleges of education as the changes came with a lot of work in terms of material production for students. It was argued that curriculum innovations were being imposed on colleges and lecturers in colleges had no choice but to accept whatever was coming from the higher offices. It was further reported that lecturers had little time to familiarize themselves with the ever changing curriculum.

CHAPTER SEVEN

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

This study investigated the impact of curriculum innovations on pre-service primary teacher education in Zambia. The study collected views from teacher educators in colleges of education, educational administrators, civil society organizations working in primary teacher education and other stakeholders on the social dynamics of curriculum innovations in pre-service primary teacher education in Zambia. The study also sought to establish why pre-service primary teacher education had been subjected to frequent curriculum changes and to identify the major agents of curriculum change in primary teacher education in Zambia.

The purpose of the study was to provide empirical research findings on the impact of curriculum innovations on pre-service primary teacher education in Zambia. It was hoped that teacher educators, education administrators, policy makers, curriculum developers and other stakeholders interested in primary teacher education could utilize this information in improving the teacher education curriculum in order to enhance the quality of teacher education in Zambia. The study has also contributed to the existing body of knowledge on curriculum innovations in pre-service primary teacher education in Zambia.

A descriptive survey design was used to carry out the research. The study employed both qualitative and quantitative techniques in order to collect detailed information about curriculum innovations in pre-service primary teacher education in Zambia. This design involved the use of questionnaires, in depth interviews, focus group discussions and analysis of documents. The questionnaire mainly used a Likert response format. The Likert format requested respondents to indicate whether they strongly agreed, agreed, disagreed or strongly disagreed with the statement posed in the questionnaire item.

The study employed purposive and snow ball sampling procedures. The study comprised 155 informants drawn from Primary Colleges of Education, Directorate of Teacher Education and Specialised Services, Curriculum Development Centre, Examinations Council of Zambia, Teacher Resource Centres, Civil Society Organisations working in primary teacher education and eminent retired educationists in Zambia. The across-case approach was used to analyse responses to the questionnaire, whereas questions in the interview guides constituted the central themes. Descriptive statistics were used in the analysis of quantitative data. Numerical data was summarized using frequency distributions, percentages and graphic presentations in form of tables and charts. Qualitative data was analysed through coding and categorization of themes that emerged from the data.

The study found that curriculum innovations in pre-service primary teacher education in Zambia were too rapid. Most of the respondents interviewed 124 (89%) observed that curriculum innovations in pre-service primary teacher education in Zambia were too

rapid. Most of the respondents strongly felt that the curriculum should be allowed to run a considerable period of time before it was phased out. Others noted that the curriculum change in pre-service primary teacher education appeared haphazard as there were too many programmes introduced within a short period. Most college lecturers and some eminent retired educationists talked to noted that the Ministry of Education had tried six curriculum innovations since independence, and most of these curricula had been on experimental basis. Some respondents felt that too many programmes were introduced within a short period of time. Others complained that the curriculum changes in pre-service primary teacher education were not linked to the school curriculum.

Most of the respondents generally disagreed with the assertion that curriculum innovations in pre-service primary teacher education in Zambia had improved the quality of graduates in primary colleges of education. Most of the respondents felt that the performance of recent college graduates from primary teacher education was questionable, they observed that teachers were generally half baked due to insufficient training. It was argued that most young teachers could not demonstrate the required skills and competencies as compared with teachers trained under different programmes. It was reported that the newly trained teachers had problems fitting in schools upon graduation as there appeared to be no linkages between the schools and colleges of education in terms of curricula, especially the element of subject integration. Some retired education officers felt that there was a deterioration of standards in primary teacher education due to lack of stability of the curriculum.

On the other hand, some respondents argued that innovations in primary teacher education had improved teaching strategies as teachers were expected to actively engage pupils during the learning process.

It was reported that there were some misunderstandings in schools among teachers due to different orientations in teacher education. Some respondents felt that generations of teachers churned out of colleges under different orientations in teacher education produced conflicting ideas in schools. It was observed that the disconnect between the school curriculum and teacher education curriculum and the different approaches in training resulted into problems among teachers.

It was also reported that most of the college lecturers were unhappy with the frequent changes in pre-service primary teacher education curriculum. Some college lecturers complained that they did not have enough time to familiarize themselves with the ever changing curriculum in teacher education. It was observed that curriculum innovations came with a lot of work for college lecturers in terms of material production for learning. In addition, some lecturers complained of constantly being oriented to new programmes as the curriculum was unstable.

A large proportion of the respondents talked to were unhappy with the way the MoE was changing the curriculum in primary pre-service teacher education. It was noted that most of the teacher education programmes were on experimental basis and were never

evaluated after donor pull-out. It was observed that ad hoc changes dampened the professional morale of lecturers in colleges of education.

College lecturers complained that frequent changes without convincing reasons made teacher education in Zambia unstable and compromised quality of training.

On the involvement of college lecturers and colleges of education in the curriculum innovation process, it was reported that colleges of education and lecturers were not consulted in the curriculum innovation process. Some lecturers hinted that they were only involved in the curriculum innovation process in the final stages to rubber stamp the programme. Most college lecturers complained that they were just being used as implementation conduits. It was noted that changes from MoE were just imposed on colleges and that sometimes lecturers who opposed the changes were threatened to be disciplined. It was reported that the MoE did not incorporate the views of lecturers in colleges of education. In addition, it was noted that the MoE had a tendency of imposing changes on colleges of education even when they knew that the MoE given its available resources could not sustain some of the programmes initiated by international funding agencies. Some officers at Teacher Education Department generally agreed with the assertion that most of the college lecturers did not understand the reasons for curriculum innovations in pre-service primary teacher in Zambia. On the other hand, some respondents hinted that some lecturers could not understand the international perspectives in teacher education as the world was becoming a global village. It was observed that some changes were rather insignificant while others looked almost the same.

With regard to preferences for primary teacher education implemented in Zambia since independence, most respondents indicated that they preferred the Zambia Primary Course. (ZPC). It was widely held that ZPC was a well designed teacher education programme with adequate time for both content and background. It was further pointed out that ZPC provided a well rounded teacher education programme and was systematic and elaborate. ZBEC was similar to ZPC, the only difference was emphasis on production unit and increased number of subjects in colleges. As for ZATEC-one year residential course, most of the respondents felt that the course was very shallow in terms of content and the quality of teachers trained under this programme were regarded as half baked. As for the ZATEC –two year residential course, some respondents felt that this programme would now cover content adequately and address some of the deficiencies observed in the ZATEC-one year residential course. However, some respondents felt that the integration of subjects under this programme would still compromise content for some subjects, especially subjects like Industrial Arts, Music, Art, Home Economics and Physical Education.

On the management of teacher education programmes in the light of frequent changes in the teacher education curriculum, most of the respondents observed that primary colleges of education had problems in managing teacher education programmes due to frequent changes in the curriculum. Some respondents felt that it was quite expensive for the MoE and Colleges of Education in terms of material production for courses. Others felt that the continuous orientation of college lecturers to new programmes was costly and cumbersome.

It was noted that there was no systematic capacity building of lecturers due to sporadic changes of the curriculum as lecturers were always learning and had no time to conceptualise some of the changes.

Some college lecturers and retired educationists complained about too many uncoordinated programmes in teacher education initiated by co-operating partners in the name of technical assistance. Some eminent educationists interviewed argued that some of the changes introduced in the curriculum by foreign experts did not suit the Zambian situation. It was observed that sustainability of some of the innovations was questionable in cases of donor pull-out. Some of the programmes initiated by donors were abandoned once the financiers pulled out. Some informants noted that materials and facilities for use in the ever changing curriculum were inadequate.

On the assertion that curriculum innovations in pre-service primary teacher education have had a negative impact on the Colleges of Education in Zambia, most of the respondents, 117 (83.5%) agreed with the assertion while 22(15.7%) disagreed with the assertion. Some of the respondents indicated that they were getting bored and frustrated with the sporadic changes of the teacher education curriculum. Others felt that some innovations like the ZATEC-one year residential programme had compromised standards of teacher education and produced half baked teachers. It was noted that some retired educationists were wondering what had gone amiss with teacher education in Zambia.

The negative impact observed due to constant changes of the curriculum was associated with the shallow content and inadequate time for college-based training, incompetent teachers churned out of colleges of education and the instability of the teacher education curriculum coupled with insufficient materials and facilities for training.

On the assertion that curriculum innovations in pre-service teacher education in Zambia were drawn and implemented in a haste without a solid philosophical foundation, most of the respondents, 127 (90.7%), generally agreed with this assertion. Quite on the contrary, 13 (9.2%) of the respondents generally disagreed with the assertion that curriculum innovations in pre-service primary teacher education in Zambia were drawn and implemented in a haste without a solid philosophical foundation. Some respondents pointed out that some teacher education programmes in Zambia were designed in a hurry in order to improve the numbers of teachers in the field at the expense of quality. Others noted that the pace of change for curriculum innovations in pre-service primary teacher education in Zambia were too rapid and never gave room to lecturers in colleges of education for reflection.

In addition, some respondents felt that some of the curriculum changes in teacher education were ill conceived and not informed by research but by the whims of the financiers. It was noted that piecemeal changes in primary teacher education were detrimental to the training of teachers in Zambia as quality was being compromised. On the observation that curriculum innovations in pre-service primary teacher education were initiated and financed by external agents, most of the respondents 129(92%) agreed

with this assertion. It was noted that foreign initiated programmes were not sustainable and were out of touch with reality on the ground. Some retired educationists interviewed argued that the dependence of the MoE on technical assistance to design teacher education programmes should be discouraged as Zambia had a lot of experts in teacher education who would help the MoE in designing suitable programmes in teacher education to fit the Zambian situation. However, some informants argued that the MoE appeared to have no capacity to generate home grown curriculum innovations. It was observed that reliance on foreign technical assistance was detrimental to the local situation.

In addition, it was noted that piecemeal curriculum innovations in pre-service teacher education in Zambia had not served the desired purposes as some of the changes looked almost the same. Most of the respondents, 125(89.2%) felt that piece meal curriculum innovations in pre-service teacher training in Zambia had not served the desired purposes as some of the changes looked almost the same. Some respondents argued that some of the innovations initiated by some co-operating partners were aimed at weakening the education system of third world countries so as to keep them in perpetual dependency on stronger economies. Others noted that the real issues in terms of strengthening the curriculum of teacher education were not addressed as the teacher education curriculum was devoid of entrepreneurship skills that were critical for individual development of learners. It was observed that the rationale of the changes appeared obscure as some of the changes looked almost the same.

It is evident from the findings that most of our informants felt that curriculum innovations in pre-service primary teacher education in Zambia were too rapid. Most of the respondents strongly thought that the curriculum should be allowed to run a considerable period of time before it is phased out. It was observed that the MoE had made several attempts to reform primary teacher education curriculum so that it is relevant and of good quality. However, in spite of all the efforts made so far, the problem of teacher training seems to persist. Since independence, Zambia has undertaken six curriculum innovations in primary teacher education, namely, Zambia Primary Course (ZPC), Zambia Basic Education Course (ZBEC), Field Based Teacher Training Approach (FIBATTA), Zambia Teacher Education Reform Programme (ZATERP), Zambia Teacher Education Course (ZATEC-one year residential course) and the transformed Zambia Teacher Education Course (ZATEC-two year residential course) which was under implementation at the time of writing this thesis. It was noted that all these curriculum innovations have been on experimental basis without any solid philosophical foundation anchored in research. Some informants strongly believed that teacher education problems had persisted largely because curriculum innovations in pre-service primary teacher education appeared to be hurried and imposed by external funding agencies in the name of technical assistance. However, the nature of technical assistance that is given is largely based on foreign experience without sufficient local participation. The socio-politics of these innovations or changes are that externally influenced changes or innovations are sometimes received with suspicion and antagonism because the local stakeholders feel that their ideas or views are not given priority.

It was observed that the adoption of curricula evolved by other countries without regard to differences in social, economic and cultural background could have negative results. Adaptation is different from adoption. The goals and aspirations of third world countries are very different in many cases from those in other countries, and so it would be inappropriate for them to adopt educational systems developed for countries with quite different aims and priorities and emphases. With a view to remedying this state of affairs, some eminent educationists talked to argued that unless Zambia evolves a teacher education system according to its social, economic and political needs, the primary teacher education system in Zambia would continue to be mere intellectual ornamentation. Some informants from Civil Society Organisations pointed out that curriculum innovations in pre-service primary teacher education were drawn and implemented in a haste to satisfy a donor agenda and for political expediency. Most of the respondents observed that piecemeal curriculum innovations or changes in primary teacher education in Zambia have not served the desired purposes as most of the programmes initiated by external funding agencies grind to a halt once the financiers leave. Generally, it was felt that a well considered, professionally designed primary teacher education curriculum that is fully oriented towards the primary school curriculum is a pre-requisite for reforms in primary teacher education in Zambia that will stand the test of time.

RECOMMENDATIONS

The following recommendations were made based on the findings of the study.

1. Sporadic changes of the teacher education curriculum without evaluation of programmes should be discouraged as some of the changes appeared haphazard. The absence of a properly coordinated administrative system for Teacher Education in Zambia is an area of major concern. Currently, the management of the Zambia Teacher Education System rests with the Directorate of Teacher Education and Specialised Services (TESS) of the MoE. TESS is responsible for the overall administration of the system including personnel and budgets management and performance monitoring related to teacher education. TESS also has the jurisdiction over Colleges of Education (CE's) and Teacher Resource Centres (TRC's) across the country. Nonetheless, there are many other stakeholders playing key roles in operating the teacher system in the country. Apparently, TESS appears to have no authority in teacher education for decision making and coordination. TESS has to consult the other Directorates on other important activities of teacher education.
2. Monitoring and evaluation of teacher education programmes should be encouraged in order to generate vital information to foster research based decision making and to improve efficiency and effectiveness of teacher education programmes.

3. In order to avoid piecemeal changes in pre-service primary teacher education curriculum, the MoE should establish a National Teacher Education Authority as a statutory body with powers to regulate teacher education in the entire country. This authority should have jurisdiction over all teacher education institutions. It should be responsible for defining the broad content and structure of teacher education curricula. The responsibility for all new initiatives (innovations) in teacher education including the launch of new programmes, projects and institutions should have the clearance and approval of the coordinating agency. This authority should be vested with power to approve teacher education curricula in order to avoid duplication of effort and resources.
4. MoE through TESS should provide enough room for effective participation of teacher educators in colleges of education, civil society organizations working in teacher education and other stakeholders in all teacher education processes including curricular reviews.
5. The Directorate of Teacher Education and Specialised Services (TESS) should be strengthened. It is important to have a strong internal co-ordinating mechanism to administer operations in teacher education. The Directorate will be better served if it has a sufficient strength of academic officers who are sensitive to the needs of the profession and have appropriate administrative as well as academic competencies.
6. CDC, TESS, ECZ, UNZA, CE's and Civil Society Organisations working in teacher education should periodically organize expert meetings to review and analyse the existing curricula of teacher education so as to clearly formulate and

agree on the types of theoretical and practical orientations in primary teacher education with regard to disciplines to be offered and the professional needs of the programmes.

7. There should be strong linkages in terms of curricula between primary schools and pre-service primary colleges of education. These linkages are important in ensuring that graduates from colleges of education have no problems when they are deployed in schools.
8. Curriculum innovations should address practical and entrepreneurship skills. Experimental curriculum shifts initiated by international funding agencies in the name of technical assistance should fit the local situation and college lecturers should be consulted before changes are made to the existing curriculum.

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APPENDICES



THE UNIVERSITY OF ZAMBIA

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY, SOCIOLOGY AND SPECIAL EDUCATION

6th October, 2008.

The Director.
Examinations Council of Zambia
LUSAKA.

Dear Sir / Madam,

**SUB: REQUEST TO COLLECT RESEARCH DATA FROM OFFICERS AT
THE EXAMINATIONS COUNCIL OF ZAMBIA**

This letter serves to introduce *Mr. Kalisto Kalimaposo*, a member of staff in the Department of Educational Psychology, Sociology and Special Education.

Mr. Kalimaposo is conducting a study entitled *The Impact of Curriculum Reforms on Pre-service Primary Teacher Education in Zambia*. This study seeks to provide empirical research findings and an analytical review of the impact of curriculum reforms on pre-service primary teacher education in Zambia. The study is under the supervision of the University of Zambia, School of Education.

I would be grateful if you could facilitate his collection of data from your officers.

Sincerely,

Oswell Chakulimba (Ph.D)
Head of Department.

Cc. Dean, School of Education.



THE UNIVERSITY OF ZAMBIA

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY, SOCIOLOGY AND SPECIAL EDUCATION

6th October, 2008.

The Director.

Directorate of Teacher Education and Specialised Services (TESS)

Ministry of Education

LUSAKA.

Dear Sir / Madam,

SUB: REQUEST TO COLLECT RESEARCH DATA FROM COLLEGES OF EDUCATION AND TEACHER EDUCATION DEPARTMENT

This letter serves to introduce *Mr. Kalisto Kalimaposo*, a member of staff in the Department of Educational Psychology, Sociology and Special Education.

Mr. Kalimaposo is conducting a study entitled *The Impact of Curriculum Reforms on Pre-service Primary Teacher Education in Zambia*. This study seeks to provide empirical research findings and an analytical review of the impact of curriculum reforms on pre-service primary teacher education in Zambia. The study is under the supervision of the University of Zambia, School of Education.

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THE UNIVERSITY OF ZAMBIA
SCHOOL OF EDUCATION

**DEPARTMENT OF EDUCATIONAL PSYCHOLOGY, SOCIOLOGY AND
SPECIAL EDUCATION**

6th October, 2008.

The Director.
Curriculum Development Centre
Ministry of Education
LUSAKA.

Dear Sir / Madam,

**SUB: REQUEST TO COLLECT RESEARCH DATA FROM OFFICERS AT
THE CURRICULUM DEVELOPMENT CENTRE**

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I would be grateful if you could facilitate his collection of data from your officers.

Sincerely,

Oswell Chakulimba (Ph.D)

Head of Department.

Cc. Dean, School of Education.

INTERVIEW GUIDE for officers at Teacher Education and Specialised Services (TESS)

1. Why is pre-service primary teacher education in Zambia subjected to regular curriculum innovations?
2. What is the rationale behind the changes in primary teacher in Zambia?
3. In your view, is there any significant difference in terms of teacher competence between teachers trained under ZPC, ZBEC and ZATEC?
4. Who are the major agents of curriculum innovations in primary teacher education in Zambia?
5. What is the effect of frequent curriculum innovations on the Primary Colleges of Education in Zambia?
6. Some school managers have complained about the perceived confusion in Basic Schools due to different orientations in teacher education by teachers. What is your comment?
7. It has been observed that piecemeal reforms in pre-service primary teacher education in Zambia have not served the desired purposes as some of the changes look almost the same. What is your comment?
8. The Ministry of Education plans to convert the existing two year residential ZATEC programme to a three year Diploma programme and to affiliate all colleges of education to the University of Zambia. What strategies or mechanisms have you put in place to push this reform?

- 9.** Some organizations involved in primary teacher education in Zambia have argued that curriculum innovations in Zambia are initiated and financed by external agents. What is your comment?

- 10.** What would you like to see in terms of curriculum innovations in pre-service primary teacher education in Zambia?

**INTERVIEW GUIDE for officers at the Curriculum Development Centre
(CDC)**

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 - 10.** What would you like to see in terms of curriculum innovations in pre-service primary teacher education in Zambia?
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**INTERVIEW GUIDE for officers at the Examinations Council of Zambia
(ECZ)**

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INTERVIEW GUIDE for Lecturers in Colleges of Education

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INTERVIEW GUIDE for Teacher Resource Centre Co ordinators

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- 6.** Some school managers have complained about the perceived confusion in Basic Schools due to different orientations in teacher education by teachers. What is your comment?
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- 8.** The Ministry of Education plans to convert the existing two year residential ZATEC programme to a three year Diploma programme and to affiliate all

colleges of education to the University of Zambia. What strategies or mechanisms have you put in place to push this reform?

- 9.** Some organizations involved in primary teacher education in Zambia have argued that curriculum innovations in Zambia are initiated and financed by external agents. What is your comment?

 - 10.** What would you like to see in terms of curriculum innovations in pre-service primary teacher education in Zambia?
-

INTERVIEW GUIDE for Eminent Educationists in Zambia.

- 1.** Why is pre-service primary teacher education in Zambia subjected to regular curriculum innovations?
- 2.** What is the rationale behind the changes in primary teacher in Zambia?
- 3.** In your view, is there any significant difference in terms of teacher competence between teachers trained under ZPC, ZBEC and ZATEC?
- 4.** Who are the major agents of curriculum innovations in primary teacher education in Zambia?
- 5.** What is the effect of frequent curriculum innovations on the Primary Colleges of Education in Zambia?
- 6.** Some school managers have complained about the perceived confusion in Basic Schools due to different orientations in teacher education by teachers. What is your comment?
- 7.** It has been observed that piecemeal reforms in pre-service primary teacher education in Zambia have not served the desired purposes as some of the changes look almost the same. What is your comment?

- 8.** The Ministry of Education plans to convert the existing two year residential ZATEC programme to a three year Diploma programme and to affiliate all colleges of education to the University of Zambia. What strategies or mechanisms have you put in place to push this reform?
 - 9.** Some organizations involved in primary teacher education in Zambia have argued that curriculum innovations in Zambia are initiated and financed by external agents. What is your comment?
 - 10.** What would you like to see in terms of curriculum innovations in pre-service primary teacher education in Zambia?
-

INTERVIEW GUIDE for Retired Education Officers

- 1.** Why is pre-service primary teacher education in Zambia subjected to regular curriculum innovations?
- 2.** What is the rationale behind the changes in primary teacher in Zambia?
- 3.** In your view, is there any significant difference in terms of teacher competence between teachers trained under ZPC, ZBEC and ZATEC?
- 4.** Who are the major agents of curriculum innovations in primary teacher education in Zambia?
- 5.** What is the effect of frequent curriculum innovations on the Primary Colleges of Education in Zambia?
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- 7.** It has been observed that piecemeal reforms in pre-service primary teacher education in Zambia have not served the desired purposes as some of the changes look almost the same. What is your comment?

- 8.** The Ministry of Education plans to convert the existing two year residential ZATEC programme to a three year Diploma programme and to affiliate all colleges of education to the University of Zambia. What strategies or mechanisms have you put in place to push this reform?

 - 9.** Some organizations involved in primary teacher education in Zambia have argued that curriculum innovations in Zambia are initiated and financed by external agents. What is your comment?

 - 10.** What would you like to see in terms of curriculum innovations in pre-service primary teacher education in Zambia?
-

INTERVIEW GUIDE for Civil Society Organisations in Zambia working in teacher education

1. Why is pre-service primary teacher education in Zambia subjected to regular curriculum innovations?
2. What is the rationale behind the changes in primary teacher in Zambia?
3. In your view, is there any significant difference in terms of teacher competence between teachers trained under ZPC, ZBEC and ZATEC?
4. Who are the major agents of curriculum innovations in primary teacher education in Zambia?
5. What is the effect of frequent curriculum innovations on the Primary Colleges of Education in Zambia?
6. Some school managers have complained about the perceived confusion in Basic Schools due to different orientations in teacher education by teachers. What is your comment?
7. It has been observed that piecemeal reforms in pre-service primary teacher education in Zambia have not served the desired purposes as some of the changes look almost the same. What is your comment?

- 8.** The Ministry of Education plans to convert the existing two year residential ZATEC programme to a three year Diploma programme and to affiliate all colleges of education to the University of Zambia. What strategies or mechanisms have you put in place to push this reform?

 - 9.** Some organizations involved in primary teacher education in Zambia have argued that curriculum innovations in Zambia are initiated and financed by external agents. What is your comment?

 - 10.** What would you like to see in terms of curriculum innovations in pre-service primary teacher education in Zambia?
-

INTERVIEW GUIDE for College Principal or Vice Principal

- 1.** Why is pre-service primary teacher education in Zambia subjected to regular curriculum innovations?
- 2.** What is the rationale behind the changes in primary teacher in Zambia?
- 3.** In your view, is there any significant difference in terms of teacher competence between teachers trained under ZPC, ZBEC and ZATEC?
- 4.** Who are the major agents of curriculum innovations in primary teacher education in Zambia?
- 5.** What is the effect of frequent curriculum innovations on the Primary Colleges of Education in Zambia?
- 6.** Some school managers have complained about the perceived confusion in Basic Schools due to different orientations in teacher education by teachers. What is your comment?
- 7.** It has been observed that piecemeal reforms in pre-service primary teacher education in Zambia have not served the desired purposes as some of the changes look almost the same. What is your comment?

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 - 9.** Some organizations involved in primary teacher education in Zambia have argued that curriculum innovations in Zambia are initiated and financed by external agents. What is your comment?

 - 10.** What would you like to see in terms of curriculum innovations in pre-service primary teacher education in Zambia?
-

Focus Group Discussions for Lecturers in Colleges of Education

1. Why is pre-service primary teacher education in Zambia subjected to regular curriculum innovations?
2. What is the rationale behind the changes in primary teacher in Zambia?
3. In your view, is there any significant difference in terms of teacher competence between teachers trained under ZPC, ZBEC and ZATEC?
4. Who are the major agents of curriculum innovations in primary teacher education in Zambia?
5. What is the effect of frequent curriculum innovations on the Primary Colleges of Education in Zambia?
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- 9.** Some organizations involved in primary teacher education in Zambia have argued that curriculum innovations in Zambia are initiated and financed by external agents. What is your comment?

- 10.** What would you like to see in terms of curriculum innovations in pre-service primary teacher education in Zambia?

QUESTIONNAIRE for officers at Teacher Education and Specialised Services (TESS)

Dear Sir / Madam,

You are among the few officers purposively selected from the Directorate of Teacher Education and Specialised Services to participate in this study entitled *The Impact of Curriculum Reforms on Pre-service Primary Teacher Education in Zambia*. The information you will provide is in confidence and for anonymity's sake, you are not required to indicate your name on the questionnaire. This study is being conducted under the supervision of the University of Zambia, School of Education.

I would appreciate your co operation and truthful responses to this questionnaire.

Kalisto Kalimaposo
University of Zambia
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P.O. Box 32379
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e-mail: kkalimaposo@yahoo.com

INSTRUCTIONS

You are required to tick the responses that are in agreement with your opinion in the brackets given. In some cases you have to write your responses in the spaces provided. Please answer all the questions.

SECTION A.

1. Sex

Male [] Female []

2. What is your age?

20-25	[]
26-30	[]
31-35	[]
36-40	[]
41-50	[]
51-55	[]
56 and above	[]

3. Number of years in service

0 - 5	[]
6 - 10	[]
11 - 15	[]
16 - 20	[]
21 - 25	[]
26 - 30	[]
31 and above	[]

4. What is your substantive position?

(indicate) _____

5. What is your highest academic qualification?

(indicate) _____

SECTION B

6. Curriculum innovations in pre-service primary teacher education in Zambia are too rapid.

- A. Strongly agree []
- B. Agree []
- C. Disagree []
- D. Strongly disagree []

Give reasons for your answer.

7. Curriculum innovations in pre-service primary teacher education in Zambia has improved the standard of graduates in primary colleges of education.

- A. Strongly agree []
- B. Agree []
- C. Disagree []
- D. Strongly disagree []

Give reasons for your answer.

8. There is confusion in schools due to different orientations in teacher training.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

9. Most of the college lecturers are unhappy with the frequent changes in the pre-service primary teacher education curriculum.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

10. College lecturers are not consulted in the curriculum reform process.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

11. Most of the college lecturers do not understand the reasons for curriculum innovations in pre-service primary teacher education in Zambia.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

12. Frequent curriculum innovations in pre-service primary teacher education have contributed to the low standard of teachers in Zambia.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

13. Which one of the following primary teacher education programmes do you prefer?

- A. Zambia Primary Course []
- B. Zambia Basic Education Course []
- C. Zambia Teacher Education Course(with one year school based) []
- D. Zambia Teacher Education Course(two-year residential course) []

Give reasons for your answer.

14. How do you rate the following teacher education courses in terms of pre-service teacher education in Zambia.

Course/ Programme	Very Good	Good	Satisfactory	Unsatisfactory
Zambia Primary Course (ZPC)				
Zambia Basic Education Course (ZBEC)				
Zambia Teacher Education Course(ZATEC with one year school based)				
Zambia Teacher Education Course-ZATEC with two year residential course)				

15. Primary colleges of education have problems in managing teacher education programmes due to frequent changes in the curriculum.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

16. Curriculum innovations in pre-service primary teacher education have had a negative impact on the colleges of education in Zambia.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

17. Curriculum innovations in pre-service primary teacher education in Zambia are drawn and implemented in a haste without a solid philosophical foundation.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

18. Curriculum innovations in pre-service primary teacher education are initiated and financed by external agents (foreign experts).

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

19. Piecemeal curriculum innovations in pre-service primary teacher education in Zambia have not served the desired purposes as some of the changes almost look the same.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

20. The frequent curriculum innovations in pre-service teacher education have had a negative effect on the primary colleges of education.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

QUESTIONNAIRE for officers at the Examinations Council of Zambia

Dear Sir / Madam,

You are among the few officers purposively selected from the Examinations Council of Zambia to participate in this study entitled *The Impact of Curriculum Reforms on Pre-service Primary Teacher Education in Zambia*. The information you will provide is in confidence and for anonymity's sake, you are not required to indicate your name on the questionnaire. This study is being conducted under the supervision of the University of Zambia, School of Education.

I would appreciate your co operation and truthful responses to this questionnaire.

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e-mail: kkalimaposo@yahoo.com

INSTRUCTIONS

You are required to tick the responses that are in agreement with your opinion in the brackets given. In some cases you have to write your responses in the spaces provided. Please answer all the questions.

SECTION A.

3. Sex

Male [] Female []

4. What is your age?

20-25	[]
26-30	[]
31-35	[]
36-40	[]
41-50	[]
51-55	[]
56 and above	[]

3. Number of years in service

0 - 5	[]
6 - 10	[]
11 - 15	[]
16 - 20	[]
21 - 25	[]
26 - 30	[]
31 and above	[]

4. What is your substantive position?

(indicate) _____

5. What is your highest academic qualification?

(indicate) _____

SECTION B

6. Curriculum innovations in pre-service primary teacher education in Zambia are too rapid.

- A. Strongly agree []
- B. Agree []
- C. Disagree []
- D. Strongly disagree []

Give reasons for your answer.

7. Curriculum innovations in pre-service primary teacher education in Zambia has improved the standard of graduates in primary colleges of education.

- A. Strongly agree []
- B. Agree[]
- C. Disagree[]
- D.Strongly disagree[]

Give reasons for your answer.

8. There is confusion in schools due to different orientations in teacher training.

- A Strongly agree[]
- B Agree[]
- C Disagree[]
- D Strongly disagree[]

Give reasons for your answer.

9. Most of the college lecturers are unhappy with the frequent changes in the pre-service primary teacher education curriculum.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

10. College lecturers are not consulted in the curriculum reform process.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

11. Most of the college lecturers do not understand the reasons for curriculum innovations in pre-service primary teacher education in Zambia.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

12. Frequent curriculum innovations in pre-service primary teacher education have contributed to the low standard of teachers in Zambia.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

13. Which one of the following primary teacher education programmes do you prefer?

- A. Zambia Primary Course []
- B. Zambia Basic Education Course []
- C. Zambia Teacher Education Course(with one year school based) []
- D. Zambia Teacher Education Course(two-year residential course) []

Give reasons for your answer.

14. How do you rate the following teacher education courses in terms of pre-service teacher education in Zambia.

Course/ Programme	Very Good	Good	Satisfactory	Unsatisfactory
Zambia Primary Course (ZPC)				
Zambia Basic Education Course (ZBEC)				
Zambia Teacher Education Course(ZATEC with one year school based)				
Zambia Teacher Education Course-ZATEC with two year residential course)				

15. Primary colleges of education have problems in managing teacher education programmes due to frequent changes in the curriculum.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

16. Curriculum innovations in pre-service primary teacher education have had a negative impact on the colleges of education in Zambia.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

17. Curriculum innovations in pre-service primary teacher education in Zambia are drawn and implemented in a haste without a solid philosophical foundation.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

18. Curriculum innovations in pre-service primary teacher education are initiated and financed by external agents (foreign experts).

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

19. Piecemeal curriculum innovations in pre-service primary teacher education in Zambia have not served the desired purposes as some of the changes almost look the same.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

20. The frequent curriculum innovations in pre-service teacher education have had a negative effect on the primary colleges of education.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

QUESTIONNAIRE for officers at the Curriculum Development Centre

Dear Sir / Madam,

You are among the few officers purposively selected from the Curriculum Development Centre to participate in this study entitled *The Impact of Curriculum Reforms on Pre-service Primary Teacher Education in Zambia*. The information you will provide is in confidence and for anonymity's sake, you are not required to indicate your name on the questionnaire. This study is being conducted under the supervision of the University of Zambia, School of Education.

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INSTRUCTIONS

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SECTION A.

5. Sex

Male [] Female []

6. What is your age?

20-25	[]
26-30	[]
31-35	[]
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41-50	[]
51-55	[]
56 and above	[]

3. Number of years in service

0 - 5	[]
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11 - 15	[]
16 - 20	[]
21 - 25	[]
26 - 30	[]
31 and above	[]

4. What is your substantive position?

(indicate) _____

5. What is your highest academic qualification?

(indicate) _____

SECTION B

6. Curriculum innovations in pre-service primary teacher education in Zambia are too rapid.

- A. Strongly agree []
- B. Agree []
- C. Disagree []
- D. Strongly disagree []

Give reasons for your answer.

7. Curriculum innovations in pre-service primary teacher education in Zambia has improved the standard of graduates in primary colleges of education.

- A. Strongly agree []
- B. Agree []
- C. Disagree []
- D. Strongly disagree []

Give reasons for your answer.

8. There is confusion in schools due to different orientations in teacher training.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

9. Most of the college lecturers are unhappy with the frequent changes in the pre-service primary teacher education curriculum.

- A. Strongly agree[]
- B. Agree[]
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Give reasons for your answer.

10. College lecturers are not consulted in the curriculum reform process.

- A. Strongly agree[]
- B. Agree[]
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Give reasons for your answer.

11. Most of the college lecturers do not understand the reasons for curriculum innovations in pre-service primary teacher education in Zambia.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

12. Frequent curriculum innovations in pre-service primary teacher education have contributed to the low standard of teachers in Zambia.

- A. Strongly agree[]
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Give reasons for your answer.

13. Which one of the following primary teacher education programmes do you prefer?

- A. Zambia Primary Course []
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Give reasons for your answer.

14. How do you rate the following teacher education courses in terms of pre-service teacher education in Zambia.

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15. Primary colleges of education have problems in managing teacher education programmes due to frequent changes in the curriculum.

- A. Strongly agree[]
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Give reasons for your answer.

16. Curriculum innovations in pre-service primary teacher education have had a negative impact on the colleges of education in Zambia.

- A. Strongly agree[]
- B. Agree[]
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Give reasons for your answer.

17. Curriculum innovations in pre-service primary teacher education in Zambia are drawn and implemented in a haste without a solid philosophical foundation.

- A. Strongly agree[]
- B. Agree[]
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Give reasons for your answer.

18. Curriculum innovations in pre-service primary teacher education are initiated and financed by external agents (foreign experts).

- A. Strongly agree[]
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Give reasons for your answer.

19. Piecemeal curriculum innovations in pre-service primary teacher education in Zambia have not served the desired purposes as some of the changes almost look the same.

- A. Strongly agree[]
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Give reasons for your answer.

20. The frequent curriculum innovations in pre-service teacher education have had a negative effect on the primary colleges of education.

- A. Strongly agree[]
- B. Agree[]
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QUESTIONNAIRE for Lecturers in Colleges of Education

Dear Sir / Madam,

You are among the few officers purposively selected from Colleges of Education to participate in this study entitled *The Impact of Curriculum Reforms on Pre-service Primary Teacher Education in Zambia*. The information you will provide is in confidence and for anonymity's sake, you are not required to indicate your name on the questionnaire. This study is being conducted under the supervision of the University of Zambia, School of Education.

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Male [] Female []

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26-30	[]
31-35	[]
36-40	[]
41-50	[]
51-55	[]
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3. Number of years in service

0 - 5	[]
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11 - 15	[]
16 - 20	[]
21 - 25	[]
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4. What is your substantive position?

(indicate) _____

5. What is your highest academic qualification?

(indicate) _____

SECTION B

6. Curriculum innovations in pre-service primary teacher education in Zambia are too rapid.

- A. Strongly agree []
- B. Agree []
- C. Disagree []
- D. Strongly disagree []

Give reasons for your answer.

7. Curriculum innovations in pre-service primary teacher education in Zambia has improved the standard of graduates in primary colleges of education.

- A. Strongly agree []
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- D. Strongly disagree []

Give reasons for your answer.

8. There is confusion in schools due to different orientations in teacher training.

- A. Strongly agree[]
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- D. Strongly disagree[]

Give reasons for your answer.

9. Most of the college lecturers are unhappy with the frequent changes in the pre-service primary teacher education curriculum.

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Give reasons for your answer.

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11. Most of the college lecturers do not understand the reasons for curriculum innovations in pre-service primary teacher education in Zambia.

- A. Strongly agree[]
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- C. Disagree[]
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Give reasons for your answer.

12. Frequent curriculum innovations in pre-service primary teacher education have contributed to the low standard of teachers in Zambia.

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- B. Agree[]
- C. Disagree[]
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Give reasons for your answer.

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Give reasons for your answer.

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Zambia Teacher Education Course(ZATEC with one year school based)				
Zambia Teacher Education Course-ZATEC with two year residential course)				

15. Primary colleges of education have problems in managing teacher education programmes due to frequent changes in the curriculum.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

16. Curriculum innovations in pre-service primary teacher education have had a negative impact on the colleges of education in Zambia.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

17. Curriculum innovations in pre-service primary teacher education in Zambia are drawn and implemented in a haste without a solid philosophical foundation.

- A. Strongly agree[]
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- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

18. Curriculum innovations in pre-service primary teacher education are initiated and financed by external agents (foreign experts).

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- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

19. Piecemeal curriculum innovations in pre-service primary teacher education in Zambia have not served the desired purposes as some of the changes almost look the same.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

Give reasons for your answer.

20. The frequent curriculum innovations in pre-service teacher education have had a negative effect on the primary colleges of education.

- A. Strongly agree[]
- B. Agree[]
- C. Disagree[]
- D. Strongly disagree[]

