MANAGEMENT OF DISTANCE TEACHER EDUCATION IN ZAMBIA

by

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DECLARATION

I declare that *Management of distance teacher education in Zambia* is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

DEDICATION

This work is dedicated to my wife and my children

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ABSTRACT

This study is a collective case study. It assesses the various aspects of distance teacher education in the five institutions. These are the *University of Zambia*, the *Zambian Open University*, the *National In-Service Teachers' College*, the *Nkrumah College of Education* and the *Copperbelt Secondary Teachers' College*. Distance education practitioners' and distance students' views on the management of distance teacher education in Zambia were elicited.

The researcher collected data using semi-structured individual and focused group interviews, and observations. In addition, relevant documents such as reports, policy documents and statistics were used. Also, the researcher analysed instructional study materials (modules) to establish whether they were suitable for distance students.

The researcher employed qualitative methods in the collection and analysis of data. Triangulation was used in order to verify the information given during this study. In terms of theory, a comprehensive literature review was carried out to determine the works other researchers had done in the area of open and distance education, especially in the field of the management of distance teacher education. The Literature review revealed that good management of distance teacher education depends on how the various aspects of distance education are managed. Furthermore, the evidence from the literature review indicates that good management of distance teacher education improves the quality of distance teacher education.

Apart from ZAOU, the other four institutions are dual-mode institutions. They offer distance education programmes and full-time programmes. The same lecturers teach both distance and full-time students.

The findings concerning the strengths of the management of distance teacher education in Zambia were: a recognition by providers and clients of the importance of distance teacher

education, an awareness of the challenges of distance teacher education as displayed in their guidelines and a positive attitude towards distance teacher education. The findings concerning the weaknesses were: inadequate student support services, inadequate channels of communication, inadequate training and professional development, problems relating to integrating Information and Communication Technology (ICT) in distance education delivery, problems concerning assignments and examinations, inadequate records management, inadequacy regarding interactive instructional materials, problems relating to staffing, and a lack of national policy on distance education in Zambia.

The overall conclusion is that the management of distance teacher education in Zambia is reasonably effective. However, the areas of concern highlighted above should be given attention if institutions that offer distance teacher education programmes are to provide quality distance teacher education.

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CHAPTER 1

INTRODUCTION TO THE STUDY

1.1 Introduction

Education is inevitable for human resource development and national development. However, in most of the developing countries, due to the inadequate resources, it is almost impossible to educate all citizens through on-campus teaching (Mwansa 2010:16). A huge amount of money is needed to establish the infrastructure for on-campus teaching which is out of the reach of the developing countries. In order to educate the majority of their people, developing countries are to depend on open learning and distance education system. Zambia is one of the developing countries in the Southern African region. There are many people in Zambia who want to learn but cannot attend on-campus classes due to various reasons such as family commitments, and the number of limited learning institutions (MOE 1996:79). The country is therefore dependent on an open learning and distance education system.

According to the *Teacher Education in Sub-Saharan Africa* (TESSA) (2005:3), the world community, through the *United Nations* (UNESCO) and other organisations, is committed to attempting to provide 'Education for All' (EFA) by 2015. This represents a significant challenge particularly in Sub-Saharan Africa where it is estimated, for example, that over 40 million children have no access to basic education. Extensive efforts are being made by national governments and international organisations to meet this goal. Inextricably linked to this is the need to supply and train effective teachers for the expanding sector. Both supply and training of teachers pose organizational and logistical problems. However, open and distance education seems to offer an alternative mode of education delivery.

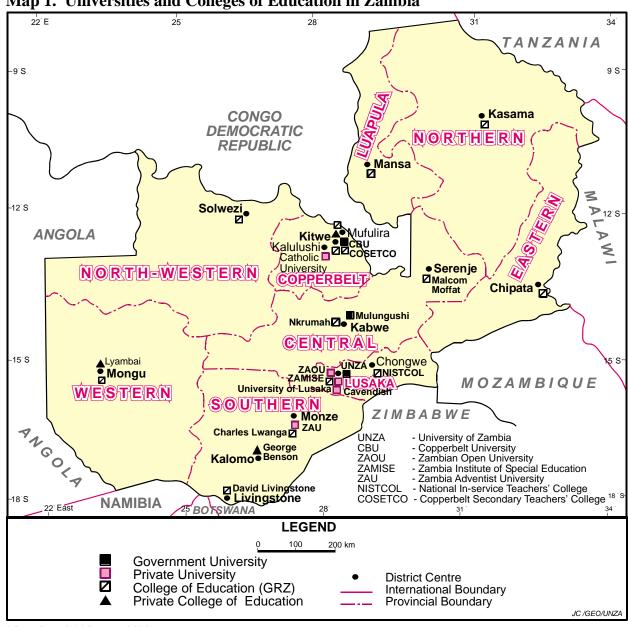
This chapter focuses on the background and motivation for study, problem situation and problem formulation, the aims of the research, research approach and methods, research designs, population and sampling and operational definition of terms.

1.2 Background to the distance teacher education institutions in Zambia

The administrative structures within which distance education systems operate have a significant influence on the system's management as a whole and on programme effectiveness. Chiyongo (2006:13) states that the range of activities involved in distance education is wider, and the skills required to develop, produce and deliver courses are more diverse than typically found in conventional education.

This thesis, entitled *Management of Distance Teacher Education in Zambia*, concerns, the management of distance teacher education programmes at the *University of Zambia*, the *Zambian Open University*, the *National In-service Teachers' College*, the *Nkrumah College of Education* and the *Copperbelt Secondary Teachers' College* (see Map 1 in section 1.2). These have been selected because they are the only ones that have been running distance teacher education programmes for some time. The *Zambia Adventist University* and the *Zambia Institute for Special Education* have been offering distance teacher education programmes for about four years only. Nkosha (2008:1) states that Zambia has a longer history of open and distance learning than most of the countries in southern region.

The map below depicts public and private institutions that offer teacher education programmes mainly through conventional means of education delivery. The institutions that started offering distance teacher education since 2005, when ZAOU was established, have not been included because they do not have sufficient experience in the management of distance teacher education in Zambia.



Map 1. Universities and Colleges of Education in Zambia

SOURCE: Field Survey, 2008.

The University of Zambia which was established in March, 1966 has had its Department of Distance Education from inception. The report on the Lockwood Commission (1963) that led to the establishment of the *University of Zambia* in March 1966 (in Kabwasa and Kaunda 1973: 80-81, Chifwepa 2006:3 & Akakandelwa 2007:16), recommended that the University should have distance students in order to realize the aim of providing more opportunities for higher studies that included teacher education programmes. Williams (1977:37) confirms that from its

inception, the *University of Zambia* accepted the obligation of providing distance education to those who could not pursue their studies on full-time basis for various reasons.

According to Kamwengo and Ndhlovu (2004:9-10) and Mwanakatwe (1971:17), the history of professional development of teachers in Zambia can be traced to the colonial period. As early as 1923 the *Advisory Committee on Native Education in British Tropical Africa* established educational policy guidelines. First, the committee recommended the establishment of a system of specially trained visiting teachers as a means of improving village schools and continuing the training of teachers. They would visit schools in rotation. It was hoped that the education system would be improved in this way.

Second, the committee recommended the establishment of institutions for training teachers and vacation teachers' conferences. Third, the committee suggested the creation of a system of government inspectors who would make the aims of education understood and give advice and help on carrying them out. The recommendations of the committee guided the provision of professional development of teachers during the colonial period.

However, during the pre-independence period in Zambia opportunities for education and training for indigenous Africans were inadequate. Very few Africans had reached the higher levels of education. Fewer than 1,000 had passed their School Certificate Examination and numbers with lower certificates were correspondingly small. Table 1.1 below gives the cumulative totals since 1933 of all Africans who had passed the named examinations at each level.

Table 1.1: 1963 Stock of educated Africans in Zambia, by highest examination passed

Level	Males	Females	Total
Standard IV (Grade 6)	86, 900	23, 300	110, 200
Standard III (Grade 5)	28, 200	4, 200	32, 400
Form II (Grade 9)	3, 940	480	4, 420
School Certificate (Grade	884	77	961
12)			

This scarcity of persons with education in Zambia was more acute at the higher levels. The conclusion was harsh: the Zambian population on the eve of Independence was, in terms of education, one of the least prepared populations in the whole of Africa (Kelly 1999:69-70).

In terms of teacher training, in 1926 there were only two institutions training teachers for primary schools, Sefula and Chalimbana (Kelly 1999:62). This resulted in the shortage of human resources and consequently affected the country's development at independence in 1964. According to Mwanakatwe (1971:105)

the vast majority of teachers have a meagre education. Only a few have received twelve years of formal education plus two or three years of training as teachers. A small but rapidly increasing number of teachers have had nine or ten years of schooling plus two years of professional training as teachers. The primary school teaching force is, however, dominated by teachers who have been educated for only eight years followed generally by a teacher training course of two years' duration. For example, there were in 1966 8, 451 teachers in unscheduled schools, both Government and aided, whose basic education consisted of only eight years of schooling ... 379 teachers were untrained.

In order to solve this problem, the government embarked on constructing primary and secondary schools shortly after independence. This was accompanied by rapid expansion of facilities for teacher training and the upgrading of teachers in Zambia. In this regard, Mwanakatwe (19971:105) states that because of the rapid growth at primary and secondary levels, the reorganization of the system of training teachers after independence was inevitable.

In 1970, the *Chalimbana Training College*, which is now NISTCOL, was made an in-service teachers' college. Prior to this decision the existing pre-service teacher training colleges in the nine provinces did most of the in-service activities (Kamwengo & Ndhlovu 2004:4). Currently, NISTCOL is running three distance learning programmes for teachers; namely: *Secondary Teachers' Diploma through Distance Learning* (STDDL), *Primary Teachers' Diploma through*

Distance Learning (PTDDL), and Diploma in Education Management (DEM) for education managers. These three programmes are expected to contribute greatly to the professional development of teachers and managerial capacity of education managers in Zambia.

The National Policy on Education, *Educating Our Future* (1996:80-81) recognizes the central importance of distance teacher education programmes. Hence, the creation of the *Directorate of Teacher Education and Specialized Service* (TESS) and the *Directorate of Open and Distance Education* (DODE) in 2002 to facilitate, among others, the management of teacher education programmes. The *Ministry of Education* will, therefore, promote open learning, lifelong education, and a wide variety of mechanisms for distance education. In this regard, the Ministry will promote distance teacher education programmes. According to the *Ministry of Education* (1996:115)

teacher education is a continuing process that must be extended throughout the individual's years of actual teaching. The foundation laid in the pre-service programme may be sound and adequate as a start, but it is not sufficient for life. ... Teaching is a learned and learning profession. Ideally, every teacher should also be learned and a learner. Diploma-level teachers have been given considerable opportunity for their personal development through registration for distance education studies, followed by full-time programmes, at the University of Zambia.

The Ministry's capacity to offer in-service training programmes is quite limited. In 1994, only 1% of serving teachers underwent formal training of one kind or another. No master plan exists to show the number and categories of teachers requiring in-service training, the nature of their training needs, the needs of the education system, and the types of programmes that would best meet these needs.

At the moment the only three colleges of education that are affiliated with the *University of Zambia* and which are offering distance teacher education programmes are the *National In-Service Teachers' College*, the *Nkrumah College of Education* and the *Copperbelt Secondary*

Teachers' College. They all offer Secondary Teachers' Diploma through distance learning. The STDDL is mainly pursued by primary school teachers so that they are able to teach the upper basic grades (grades 8 and 9) in the subjects that they specialize in. In addition to STDDL, the National In-Service Teachers' College has the Primary Teachers' Diploma through Distance Learning, the Diploma in Education Management and the Diploma in Guidance, Counseling and Placement. The qualifications obtained through full-time study are exactly the same as those obtained through distance education.

The *Ministry of Education* has given primary school teachers an opportunity to enroll for STDDL. The *Diploma in Guidance, Counseling and Placement* is taken by both primary and secondary school teachers as a postgraduate qualification, while the *Diploma in Education Management* is a postgraduate qualification for education managers who are not currently trained to discharge their managerial functions effectively and efficiently.

The *University of Zambia*, that has been offering distance teacher education programmes since its inception, is currently offering the following distance teacher education programmes:

- (a) Diploma in Adult Education
- (b) Bachelor of Education (BEd Adult Education)
- (c) Bachelor of Arts with Education (BA Ed)
- (d) Bachelor of Education Secondary (BEd Sec.)
- (e) Bachelor of Education Primary (BEd Prim.).

The *University of Zambia* and its three affiliated teacher education colleges mentioned above have a dual mode approach. That is, the same institutions manage both distance and full-time teacher education programmes and indeed other programmes. This kind of approach has both advantages and disadvantages. One of the advantages is that it reduces costs because the same academic staff attend to both internal and distance students, while lack of qualified staff is a

major disadvantage of a dual mode approach. The academic staff are mainly qualified to teach internal students.

The Zambian Open University which was officially registered with the Ministry of Education on 23rd December, 2004 (ZAOU 2005:2), currently offers the following professional distance teacher education programmes:

- (a) Bachelor of Education Secondary (BEd Secondary)
- (b) Bachelor of Education Primary (BEd Primary)
- (c) Bachelor of Arts Guidance degree (BA Guidance)
- (d) Bachelor of Education (BEd Adult Education)
- (e) Master in Literacy Education (MEd Literacy).

As has already been stated, management of the distance education programmes is hampered by a lack of qualified distance education practitioners. Most of the lecturers at both university and college levels are not trained distance education practitioners. Siaciwena (2007:9) states that the *University of Zambia* has been characterized by management problems, most of them inherent in the dual mode approach. They are, mainly, based in the organizational structure and relate to decision making, administrative procedures and controls, and financial management.

Although the Zambian Open University deals only with distance students, most of its staff are not qualified distance education practitioners. Siaciwena (2007:22) confirms that student support services have in the past been affected by some problems including lack of trained staff in the area of student support.

The research on the management of the *Primary Teachers' Diploma through Distance Learning* conducted in the Chongwe District of Zambia by NISTCOL also revealed a number of

constraints faced during the implementation and monitoring of the programme. They included inadequate funds, poor road network and lack of reliable vehicles (Chiyongo 2006:iv).

Although the *University of Zambia* has been involved in distance education programmes since its inception in March 1966, distance education is quite a new concept to its affiliate colleges of education. The affiliate colleges of education as already been mentioned above are: the *National In-Service Teachers' College*, the *Nkrumah College of Education*, and the *Copperbelt Secondary Teachers' College*. These colleges of education started offering distance teacher education programmes in 1996.

1.3 Statement of the problem

Currently the provision of education in Zambia is predominantly through conventional institutions. Distance education is quite a new concept although the *University of Zambia* has been offering distance teacher education programmes since its inception in March, 1966. The *Zambian Open University*, the *National In-service Teachers' College*, the *Nkrumah College of Education* and the *Copperbelt Secondary Teachers' College* began offering distance teacher education programmes more recently.

Management of education, and distance education in particular, is an issue that has attracted the attention of policy-makers, educationists and researchers in recent years (Lungwangwa, Kamwengo, Mulikita, Hamaimbo, Kalabo, Sililo & Sumbwa 1995:146). Distance education is a system that requires proper methods of communication, structured planning, well-designed courses and administrative arrangements. Effective management is central to all good distance education practices, principally because the activities involved in developing and teaching distance education programmes differ in key respects from conventional education.

However, a review of Open and Distance Education literature in Zambia has revealed that studies on the provision of education through Open and Distance Education have not given attention to management of distance teacher education in Zambia. Furthermore, it is not clear whether the human resource in the institutions offering distance teacher education programmes

have the skills required to manage distance teacher education programmes (Lungwangwa *et al.* 1995:146).

Currently there are complaints from people that teachers who study through distance education The National Policy on Education, Educating Our Future (1996:125) are half-baked. acknowledges the inadequate information on the various aspects of educational management and the actual teaching-learning process within schools and colleges of education. However, according to the Public Service Training Policy (Directorate of Human Resource Development 1996:23) and the Ministry of Education Training Policy (2002:9) all training ought to be done properly in order for the graduates to contribute to the development of the country. This could be due to lack of a National Policy on Distance Education. Zambia has just started working on the National Open and Distance Learning policy. In this regard, the Honourable Minister of Education in a foreword to a draft national ODL policy said: "My ministry has embarked on the development of the national ODL policy as a priority activity in order to broaden and increase people's access to education because education is central to the development of our country" (MOE 2009:3). Braimoh and Lekoko (2005:98) observe that problems of Open and Distance Learning are due to a lack of policy framework to guide the modus operandi of achieving higher quality in the programmes offered. According to Davis (1996:30), "the government-led argument for open learning is based on the powerful influence the government exerts through the policies it announces ...".

One way of ensuring that there is effective management of distance teacher education is continuous and relevant training of distance education practitioners. A review of training literature in the *Ministry of Education* indicates that little has been done to improve the management skills of distance education practitioners (MOE 1996:145-148).

Another reason for undertaking this study was that most of the studies in education that are carried out in Zambia focused on education management training (Lungwangwa *et al.* 1995; Mebrahtu and Associates 1996; Mwanza 2005; Chiyongo 2007), managing professional development of teachers (Mulundano 2007), correspondence studies at the *University of Zambia* (Williams 1974) and development of a model plan for the application of information

communication technologies in distance education at the *University of Zambia* (Chifwepa 2006). To date little has been written concerning specifically the management of distance teacher education in Zambia.

Additionally, if quality education has to be sought, proper management of distance teacher education should receive serious attention nationally. The problem, therefore, is that management of distance teacher education in Zambia has not been assessed to determine the effectiveness of distance teacher education provided by both public and private distance education institutions (Chiyongo 2006:4).

Therefore, the researcher intends to investigate the effectiveness of the management of distance teacher education in Zambia. In order to improve the quality of education provided through open and distance education, it is important to assess the effectiveness of the distance education practitioners and the institutions that offer distance teacher education programmes as a whole. Bates (2008:1) observed that some African educational policymakers and planners remain skeptical about the legitimacy and quality of open and distance learning due to, among other reasons, a lack of an adequate ODL research to support informed decisions.

1.4 Rationale and motivation for study

The researcher is a senior education manager in the *Ministry of Education*, in Zambia. He has risen through the rank mainly through studies and has served at almost all levels of education delivery. He has improved his academic and professional studies by studying at both conventional and distance education institutions. Through interaction with distance education practitioners, both locally and abroad, the researcher learnt the skills of managing distance education. He also developed a keen interest in distance education. He realized that distance education as a mode of education delivery affords the majority of people, particularly those who are working and would like to further their studies, a chance to develop academically and professionally. The researcher also realized that although education management and administration focus on institutional improvement, little research in the management of distance teacher education in Zambia has been conducted. Therefore, the researcher was motivated by an

interest to contribute to the management of distance teacher education in Zambia by undertaking this study.

As has already been indicated, the researcher has gained a lot of experience in the field of distance education. The experience has not only been acquired as a distance education practitioner, but also as someone who has studied through the open and distance education mode. He has also conducted and presented research papers locally and abroad. One of his studies at Masters' level was conducted in the field of distance education. Therefore, the researcher has sufficient knowledge of the distance education institutions and people who will constitute the population of this study. His dissertation, entitled *Management of Primary Teachers' Diploma through distance learning in Chongwe District, Zambia*, focused on a particular distance teacher education programme at the *National In-Service Teachers' College* in the Chongwe district of Zambia. It revealed that good management of distance teacher education programmes results in quality education. It also revealed that a proper student support system is important in the management of distance teacher education in Zambia (Chiyongo 2006). The researcher therefore feels he can successfully complete this study.

The distance learning mode is steadily gaining the attention and interest of 'education loving Zambian citizens'. It is therefore, important that as Zambians we develop interest to research in this area in order to enhance the quality of education and consequently contribute to the development of our country. Good research provides accurate information on a specific topic. Therefore, the body of knowledge that will be generated by this research will hopefully be useful in the education sector, particularly in the management of distance teacher education in Zambia.

The importance of this research to the country and in particular to the education sector is to be seen in the fact that the knowledge generated through this research, especially that pertaining to the possible ways of improving the management of distance teacher education in Zambia, will not only assist the policy-makers but also the implementers of the distance teacher education programmes.

Distance education in comparison to conventional method of learning is relatively new in Zambia; hence it requires a lot of accurate information to manage this method of learning well. The recommendations, the researcher will provide, are expected to improve the management of distance teacher education in Zambia.

1.5 Significance of the study

The findings of this study might assist the *Directorate of Teacher Education and Specialised Services* of the *Ministry of Education*, the *University of Zambia*, the *Zambian Open University*, the *National In-service Teachers' College*, the *Nkrumah College of Education*, the *Copperbelt Secondary Teachers' College* and other private and public institutions in managing distance teacher education programmes more efficiently. The findings of this study would also contribute to the existing body of knowledge about what higher institutions of learning might consider to be vital aspects of the management of distance education. It may also fill some gaps in the manner in which management of distance teacher education in Zambia might be examined and assessed.

The private and public institutions offering distance teacher education programmes in Zambia will benefit from this research in the sense that they will ascertain whether their training programmes need to be changed or improved. Through interviews the researcher will investigate the effectiveness of the management of distance teacher education in Zambia which will include student support services. Conclusions, recommendations and suggestions will help the distance education practitioners in Zambia and the world in general to realize pitfalls and improve on the management of distance teacher education.

The research will emphasise the fact that effective management of distance teacher education is very important because of the nature and speed of the changes affecting open and distance education nowadays. In order to provide quality education through distance education, distance education practitioners require distance education management skills. From the research undertaken it should be possible to identify management skills that address the management of distance teacher education in Zambia.

1.6 The purpose of the study

The overall purpose of the study was to assess the effectiveness of the management of distance teacher education in Zambia (see section 1.8 for a list of the objectives of the study).

1.7 Research questions

This study will seek to answer the following main research questions:

- a) Does the management of distance teacher education at UNZA, ZAOU, NISTCOL, NCE and COSETCO include salient aspects of distance education?
- b) What are the strengths of the management of distance teacher education in Zambia?
- c) What are the weaknesses of the management of distance teacher education in Zambia?
- d) How can management of distance teacher education in Zambia be improved?

1.8 Objectives of the study

The efforts to try and respond to the above questions will be done in view of the following objectives:

- a) To find out if the management of distance teacher education in Zambia includes salient aspects of distance education.
- b) To determine the strengths of the management of distance teacher education in Zambia.
- c) To determine the weaknesses of the management of distance teacher education in Zambia.
- d) To examine how management of distance teacher education in Zambia can be improved.

1.9 Methodological issues

The research design is based on a qualitative research approach, the population and sample of this study. The methods of data collection employed, namely interviews, observations and document reviews as well as the procedure of data analysis are discussed in detail in chapter 3.

1.10 Limitations of the study

A major limitation was that the tertiary education institutions that started offering distance teacher education after the establishment of ZAOU in 2005 (ZAOU 2005:3) are not included. Another limitation was that due to inadequate resources and time, the researcher only interviewed people that had information pertaining to distance teacher education at the *University of Zambia*, the *Zambian Open University* and the three colleges of education namely NISTCOL, NCE and COSETCO.

1.11 Operational definitions of terms

Distance teaching Refers to the process of teaching through distance

education mode (Louw 2007:121-122; Keegan 1986:34;

Siaciwena 1988:220).

Distance learning Refers to the process of learning through distance

education mode (Keegan 1986:34; Louw 2007:121-122).

Open learning Refers to a philosophy which implies a conflation of shared

are beliefs about opening up learning opportunities to a

beliefs about teaching and learning. Among these beliefs

wider range of people and enabling them to learn freely and

productively without inhibitions emanating from the

barriers to access education (Chikuya 2007:8).

15

Teacher education Refers to the process of improving the effectiveness of

prospective teachers as facilitators of learning (Mamabolo

1996:67).

Senior education manager Refers to an officer entrusted with the responsibility of

managing the affairs of education in institutions or a

geographical area (Chiyongo 2007:7; Lungwangwa et al.

1995:172).

Interview guide Refers to the pre-written questions that the interviewer may

ask during the interview session. Pre-determined questions

are necessary, especially for novice researchers (White

2005:143; Chiyongo 2007:26).

Training Refers to the process of preparing someone for a job or

activity by equipping him or her with the required

knowledge and skills (Erasmus & Van Dyk 1998:91;

Chiyongo 2007:8).

Management team Refers to the group of people charged with the

responsibility of managing distance teacher education in a

given area or locality (Chiyongo 2008:21-26).

1.12 Commentary

This study explores the management of distance teacher education in Zambia by focusing on the five (5) distance teacher education institutions that have been offering distance teacher education programmes for a period of not less than five years. The institutions that have been offering distance teacher education programmes for less than five years are, inter alia, the *Adventist University* and the *Zambia Institute of Special Education* (see section 1.2, Map 1).

Distance education, structured learning in which the student and lecturer are separated by time and place, is currently the fastest growing form of domestic and international education. What was once considered a special form of education using nontraditional delivery systems is now an important concept in mainstream education. This study entitled, *Management of distance teacher education in Zambia*, seeks to investigate the effectiveness of distance teacher education in Zambia. It is hoped that the body of knowledge generated by this study will assist the education sector, and in particular distance teacher education institutions improve their management skills.

Chapter 1 introduces the study by providing a background to the management of distance teacher education in Zambia, the focus of this study. The chapter also discusses the statement of the problem, rationale and motivation, and purpose of the study. The chapter also introduces the research questions, objectives, methodological issues and limitations of the study. Finally, operational definitions of terms are outlined.

Chapter 2 provides a theoretical framework of the study. The chapter explains the following four theories namely: students' retention or attrition, interaction, autonomy and independence, and the theory of equivalency. It also describes in detail how these theoretical perspectives relate to this study.

Chapter 3 focuses on the related literature to this study. The chapter provides an analysis of the works related to the management of distance of teacher education done by others, both locally and abroad.

Chapter 4 provides information on the research design of the study. The nature of the research questions has necessitated the use of the qualitative research approach. The chapter also provides details of data sources, ethical considerations and trustworthiness of this study.

Chapter 5 focuses on the research findings and discussion. The findings for each of the methods used are discussed and collaborated with the literature discussed in chapter 3.

Chapter 6 deals with the themes that emerged from the findings. They concern the management of distance teacher education in Zambia.

Finally, chapter 7 consists of summary of findings, conclusion and recommendations.

1.13 Summary

This chapter has focused on the background and motivation to the study. The research problem, research questions and objectives of the study have been outlined. The researcher has also stated the significance and purpose of the study. The methodological issues that which will be discussed in detail in chapter 4 have been highlighted too. Finally, the researcher has explained the limitations of the study and the operational terms used in the study.

In chapter two, the researcher will discuss the theoretical framework which guides this study.

CHAPTER 2

THEORETICAL FRAMEWORK

2.1 Introduction

Distance education is not carried out haphazardly but falls within structures of a given operational mode. Marshall (2000:3-8) admits that educational theories tend to reflect the social, political, economic and philosophical values of a given period and related events. His view implies that theories are a product of existing circumstances and are, thus, formulated and implemented in order to address existing situations.

Therefore, theories too guide the practice and research of distance education. Simonson, Schlosser and Hanson (1999:1) argue that theoretical considerations give distance educators a touchstone against which decisions can be made with confidence. They also say that the understanding of theories will lead to insights telling us what in distance education is to be expected under what conditions and circumstances, thus paving the way for corroborated practical methodological application.

Theories can be described from efforts to explain or make sense of observed phenomena, or by reasoning through the implications of existing theories. Theories are necessary because they help us to understand, communicate and predict the nature of a discipline or a field of practice, its purpose, goals, and methods. Indeed theories help to shape practice, and practice in turn contributes to the development of theory.

In this chapter, the researcher discusses four theories that have guided this study. The 1987 Vincent Tinto's tentative research model of retention and attrition of distance learning, Moore (1989)'s theory of interaction, Moore (1991)'s theory of autonomy and independence, and the theory of equivalency by Simonson *et al.* in 1999. These theories are specially directed at managing distance education. Therefore, they have guided the researcher in assessing the effectiveness of the management of distance teacher education in Zambia. Finally, a

classification of models of centeredness pertaining to the management of distance education is presented since they are appropriate to this study.

2.2 Tentative model of students' retention or attrition

Many theories exist regarding student development and attrition. The most notable is Vincent Tinto's model for student attrition which was first published in 1987 (Human Resources and Skills Development Canada 2008:2). This model incorporates a variety of factors which have been found by researchers to influence student development (Simpson 2004:2). In this study, the researcher has adopted Tinto's theoretical framework because knowing the reasons that compel distance students to dropout is very important. It helps distance education practitioners to provide their students the required support services.

The model takes into consideration a student's background, their individual attributes and pretertiary education. Once these variables have been selected, it suggests that in order for a student to be satisfied at any learning institution, he or she must have success in two areas: academic and social integration. Tinto suggests that academic integration refers to goal commitments, grade performance, and intellectual development. He refers to social integration as institutional commitments, peer-group integrations, and faculty integration. Success in these areas leads to a re-evaluation of commitments which will either lead the student to continue learning or abandon the programme. Tinto as indicated in Sampson (2004:2) "continues to stress that it is necessary for institutions to understand that attrition may occur for a variety of reasons. While some reasons may stem from academic faculty of adjustments, they could just as easily come from the student". This is even more likely for distance students who are usually alone all the time.

Institutions offering distance education programmes continue to struggle with the problem of reducing the attrition rate of their distance students in order to maintain great pride in graduating a high percentage of its senior distance students who entered teacher education programmes. Not only is recruitment important, but also the retention of distance students to graduation is a mark of a quality distance education.

Students' retention becomes an essential part of distance education. Thus, increasing retention has become a goal for many educational institutions and a way of judging the quality of education. The common characteristics enhancing persistence of students on a distance learning programme may assist distance education practitioners to manage their programmes well. According to Ibrahim (2006:45), the factors that contribute to retention or attrition can be classified in three general categories as shown in Figure 2.1:

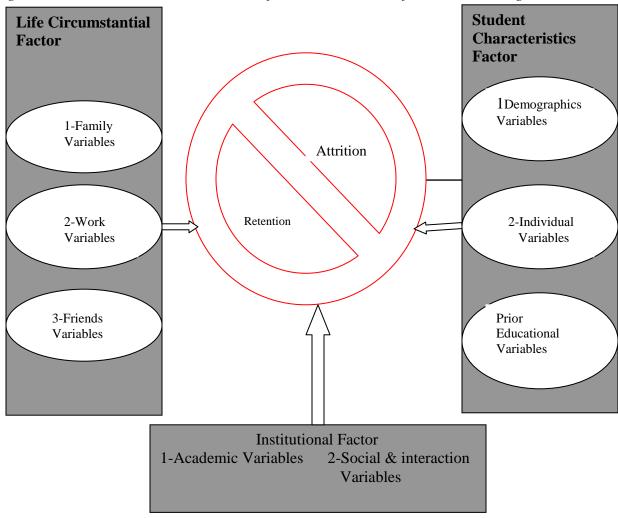


Figure 2.1: The tentative research model of retention/attrition of distance learning

Source: (*Ibrahim* 2006:45)

The first category involves students' characteristics. These factors identify the unique characteristics of distance students, which could predict the likelihood of their retention. This category according to Rekkedal (1983), Sweet (1986), and Dille and Mezack (1991) (in Ibrahim 2006:45), consists of three other variables as indicated in Table 2.1 below.

Table 2.1: Student's characteristics factors

Demographics Variables	Individual Variables	Prior Educational Variables
a) Gender	a) Belief in distance	a) Record of academic
b) Age	learning	achievements
c) Marital status	b) Locus of control	b) Prior experience in
d) Working part or	c) Learning styles	distance learning
full-time.	d) Enrolment status.	c) Academically
		successful in
		distance education
		courses
		d) Reading skills,
		communicate
		through writing
		skills using
		computer skills.

Source: (*Ibrahim* 2006:46)

The second category according to Kember (1981), Sweet (1986), Tinto (1993), Frankola (2002), and Berge and Huang (2004) (in Ibrahim 2006:45), involves the institutional factors that represent two groups of variables: academic variables and social interaction variables. The academic variables include: difficulty of programme, administrative support and quality of lecturers. The social and interaction variables have factors such as the quality and quantity of interaction with lecturers and peers through various channels of communication.

The third category often occurs outside the educational institution and is called life circumstantial factor. Largely, the academic success depends on the social systems in which the

student exists. According Ibrahim (2006:47), it has been found that the support the student receives from those people surrounding him or her has emerged a major variable in research related to persistence. Another crucial point has been that of family or job commitments. Life circumstantial factors are shown in Table 2.2 below.

Table 2.2: Life circumstantial factors

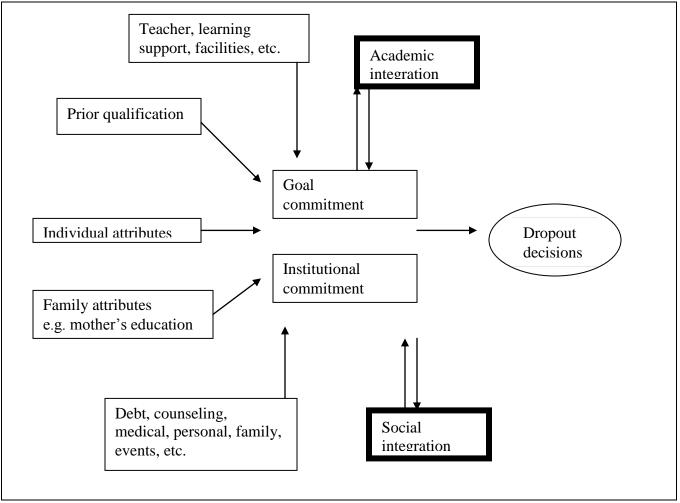
Family	7	Friend	S	Work	circumstances
a)	Family stability	a)	Encouragement	a)	Job stability
b)	Social and family	b)	Perception of	b)	Work drain
	responsibility and		distance education	c)	Co-workers' support
	obligations	c)	Success in education	d)	Management
c)	Family warmth				support
d)	Degree of			e)	Potential promotion
	encouragement			f)	Relevance of
	provided by family				distance learning to
e)	financial support				work
f)	Unexpected family			g)	Financial support
	problems, such as			h)	Perceived relevance
	illness or relocation.				to the career.

Source: (*Ibrahim* 2006:47)

The researcher will relate the discussion concerning student support services to the tentative research model of retention/attrition of distance learning (see section 3.8.3). The issue of student's characteristics factors, institutional factors and life circumstantial factors are relevant to the distance students in the five institutions namely: UNZA, ZAOU, NISTCOL, NCE and COSETCO. These institutions, therefore, ought to manage distance teacher education in such a way that their distance students are always motivated in their studies. Student support services must be developed and implemented to serve students not only by helping them develop confidence in their own strengths and abilities, but also by increasing their awareness (see section 3.8.3).

The retention theory of Tinto (1987), which was modified in 1993 (Tinto 1993:125), is one of the most widely recognized retention theories in the field of distance education. It is an accredited model for student departure and persistence. As indicated in Figure 2.2, Tinto's model highlights two factors of students' motivation. These are: their commitment to their academic objectives and their commitment to the institution where they are pursuing these objectives. Many variables such as prior qualifications, individual characteristics and those related to the academic institution, such as teaching, learning support and facilities may have direct impact on these two factors. When these two categories of variables are combined, students experience both academic and social interaction, whereas when one or both are compromised, students are more likely to drop out. This theory is related to the management of distance teacher education because distance students need to be supported and motivated in order to remain on the programme (see sections 3.8.2 & 3.8.3).

Figure 2.2: Tinto's retention model



Source: (*Ibrahim* 2006:38)

According to McEwen and Gueldenzoph (2003) (in Ibrahim 2006:38), Astin's Student Involvement Theory is analogous to that proposed by Tinto. Astin, however, places more emphasis on the role played by students' motivation and behaviour. According to him, the amount of interaction and the transactional distance are also more influential when it comes to the retention of students. Astin claims that retention can be enhanced when students are positively involved in both the academic and social aspects of the entire educational set up. Such involvement requires investments of both physical and psychological energy (Ibrahim 2006:38).

Astin argues that the success of any educational policy depends on the amount of involvement achieved. This can clearly be explained by the following chain statement: The more students

study, the more time they spend on campus, the more involved they are in student organizations, the more they interact with lecturers and other students, the more likely they are to persist and succeed. He also considers the following to be true for distance students: The more distance students interact with lecturers and fellow students through various modes of communication channels, the more likely they are to persist and successfully complete their programmes. This brings us to the theory of interaction (Holmberg 1983:114).

2.3 The theory of interaction

The theory of interaction has received much attention in the theoretical literature of distance education. It is equally important to this study because it deals with the use of study materials or content which distance education practitioners should manage properly in order to improve the quality of education through distance learning (see section 3.8.4). Moore (1989)'s theory of interaction is that all stakeholders in distance education need to be engaged in educative interaction. According to Holmberg (1995) (in Chifwepa 2006:25), the three interactions are:

- (a) Students and their lecturer are engaged in two way interaction. The lecturer provides the student with an organized plan, or curriculum for mastering the content and communicates with the student throughout the process of learning.
- (b) Students interact with students by means of group discussions and group project work.
- (c) Students interact with the content by means of study modules and other materials. In this type of interaction, the student is involved in what (Holmberg 1983:115) calls internal didactic conversation. Since the learning process is based on this interaction there is a need to produce modules and other learning materials which are student friendly.

In this theory, Moore (1989:19) suggests that when distance education practitioners design distance education materials, they should include interactions between the students and their lecturer, student and student, and student and the content. Gunawardena (1994) have taken the idea of interaction a step further and added a fourth component to the model student-interface

interaction. In this regard, the members of the Association for Educational Communications and Technology (AECT) note that the interaction between the student and the technology that delivers instruction is a critical component of the model, which has been missing thus far in the literature (AECT 2001:7). They propose a new paradigm that includes understanding the use of the interface in all transactions. Students who do not have the basic skills required to use a communication medium spend inordinate amounts of time learning to interact with the technology and have less time to learn the lesson. For this reason, instructional designers, according to them, must include student-interface interactions that enable the student to have successful interactions with the mediating technology.

Unlike in the past where distance institutions were hard pressed to provide for two-way, real time interaction, or time-delayed interaction between students and the lecturer or among peers, it is now possible to have formal group work facilitated through distance education technologies. More and more institutions that teach at a distance are integrating a combination of technologies to meet their students' needs. With the recent trend of technical advance, distance learning is becoming more recognised for its potential in providing individualised attention and communication with students internationally. This does not mean that print will no longer be used in distance education. It is more likely that print will be used as a supplementary medium and better ways of communicating information through print will be investigated and incorporated into the design of study guides and other print-based media (AECT, 2001:1).

This theory of interaction is in accordance with the concept of distance education. According to distance education, teaching and learning processes take place by use of some media, such as telephone and e-mail. In this regard: UNESCO (2002:11) states

clearly, the concept 'distance education' is concerned with a form of educational delivery where the acts of teaching and learning are separated in time and space, and technology plays a significant supporting role in enabling this form of delivery. Although distance education certainly depends on communication technology it is much more than just technology. Rather it is a total DELIVERY system.

The theory of interaction emphasizes two-way communication. Two-way communication remains a major defining feature of distance education systems today. Holmberg (1983:114) argues that distance education is different from private study because students are supported by the lecturers of distance education institution. Therefore, the student is not alone. He or she receives study materials and interacts with the tutors and other people involved in the programme. Today, the interaction is further enhanced by the rapid evolution of computers, telecommunications, and electronic learning technologies. Internet-based learning has become a popular and well-accepted methodology for delivering distance education.

A common misconception of distance learning is the scenario of a lonely person sitting at his or her computer. However, distance learning does not have to be isolating. It can also be highly interactive. Today, distance education practitioners are encouraged to develop strategies that can lead to discussion and group projects. Internet facilities can allow people to be connected to the whole world (Rossen 2009:1).

Holmberg's view of distance education as guided didactic conversation as presented schematically by Keegan (1986:97), is shown in Figure 2.3 below:

Distance education as guided didactic conversation

simulated

by correspondence

by telephone

by personal contact

internalized conversation by study of a text

conversational style of course

author (s)

Figure 2.3: Guided didactic conversation (Holmberg)

Source: (Keegan 1986:97)

Guided didactic conversation as component of the theory of interaction will guide the researcher in analyzing the communication channels and instructional materials used by UNZA, ZAOU, NISTCOL, NCE and COSETCO. Guided didactic conversation will also help the researcher to discuss issues related to communication modes, communication information technology as a tool for education delivery and accessing education, and instructional materials meaningfully. Educational technologies have indeed influenced open and distance learning very much. According to Gulati (2008:1), "learning using technologies has become a global phenomenon". Louw (2007:27) also explains that the impact of technology, which has opened new options for access to information, communication and learning, and the opportunity for enhancing new approaches to learning, has facilitated greater flexibility and blendedness in delivery options.

2.4 The theory of autonomy and independence

The theory of autonomy and independence is equally important in the management of distance teacher education. According to Bourchard and Kalman (1998:3), student autonomy is seen as a requisite in highly structured situations, where the student must compensate for the lack of pedagogical flexibility. Simultaneously, student autonomy is seen as indispensable when the student must deal with a lack of structure. According to Keegan (1986:58), contributions to theories of autonomy and independence were made in the late 1960s and early 1970s. The major representatives were Rudolf Manfred Delling (Federal Republic of Germany), Charles A. Wedemeyer (U.S.A.) and Michael G. Moore (U.K.). Delling (1978) (in Chifwepa 2006:23) sees distance education as a multi-dimensional system of learning and communication processes with the aid of an artificial signal-carrier which has to facilitate learning. A signal carrier is a device which facilities learning. The eight dimensions of distance education that Delling identified are: a student, society, distance teaching institution, a learning objective, the content to be learned, the result of learning, distance, and a signal-carrier. The latter implies that there are support services that assist a student to learn. These are considered to be important in the provision of distance teacher education.

In the theory of autonomy and independence, Moore (1991:1-6), recognizes the importance of the student's determination of his or her own learning pace and time. Nevertheless, within the framework of this independence is the need for effective dialogue between the lecturer and the student. This freedom of distance education should be considered when designing study materials. Indeed, distance education practitioners should devise systems that support this freedom. This can be in form of allowing students to exercise maximum independence with regard to choice of aims, objectives, study methods and learning activities, study pace and progression, and evaluation (Chifwepa 2006:25).

The content to be learned, the result of learning, distance, and a signal-carrier which plays an important role in the theory of autonomy and independence are important in the provision of distance teacher education. Therefore, this theory will help the researcher to articulate issues related to distance students. For example, since this theory considers the freedom of the distance

student, the researcher will have to consider this aspect when analysing the instructional materials for distance students (see sections 4.7 & 7.2.6).

The theory of autonomy and independence reduces the role of the teacher and that of the educational organisation to a minimum and places the entire emphasis on the autonomy and independence of the student. The advocates of this theory claim that nobody should be denied the opportunity to learn because he or she is poor, geographically isolated, socially disadvantaged, in poor health or unable to be in a special environment for learning. The main aim of the theory of autonomy and independence is to develop in the student the capacity to carry out self-directed learning that will enable him or her to continue learning in his or her own environment (Moore 1991:5).

Moore (2006:14) provides the following examples concerning the hypothesised relationship of autonomy, structure and dialogue:

- (a) When autonomy is low the need for structure is high and when structure is low the need for autonomy is high.
- (b) Programmes with low dialogue require a high degree of student autonomy, and programmes with low dialogue as well as low structure also require a high degree of student autonomy. Students with high autonomy require less dialogue and less structure.
- (c) Highly autonomous students may engage in auto-dialogue, that is, a situation in which a student involves herself or himself in discussion about her or his studies.
- (d) Course designers can develop highly structured courses with little room for student autonomy in setting goals, execution or evaluation, or can develop very unstructured courses, allowing students to exercise a high degree of autonomy.
- (e) An autonomous student could put together a highly structured learning programme for him or herself or could develop a loosely structured programme.

Using the examples above, distance education practitioners can design teacher education courses or materials for different degrees of student autonomy by varying dialogue and structure. It is therefore possible for distance education practitioners in Zambia and elsewhere in the world to explore and test the many interactions with and between variables. Sections 3.3, 5.2.1, 5.2.2, 7.2.7.8 and 7.4.3 of this study bear relevance to Moore's hypothesised relation of autonomy, structure and dialogue.

2.5 The theory of equivalency

When reviewing the academic research as well as the theoretical literature, it has been found that the phenomenon of equivalency, the notion that traditional and distance education delivery are equal, is very important as far as distance education is concerned. The theory of equivalency should be based on the understanding that education at a distance should be built on the concept of equivalency of learning experiences. This approach to distance education, advocates designing a collection of equivalent learning experiences for distant and internal students. These may be different for each student. The objective of the instructional designer of distance education is to provide for appropriate, equivalent learning.

This theory is based on the understanding that the student and the lecturer are separated from one another and that, where possible, two-way interactive telecommunication systems should be used to synchronously and asynchronously connect them for the sharing of video, voice, and databased instruction. The equivalency theory is supported by Shale (1988), who argued that distance education is not a distinct field of education (Simonson *et al.* 1999:8).

According to Simonson *et al.* (1999:7), there are several key elements to equivalency theory, namely, the concepts of equivalency, learning experiences, appropriate application, students, and outcomes. These are explained as follows:

(a) Equivalency. Central to this theoretical approach is the concept of equivalency. Local and distant students have different environments in which to learn. It is the responsibility

of the distance educator to design learning events or modules that provide experiences with equal value for students. In this regard, it could be mentioned that a triangle and a square with the same area could be considered equivalent even though they are different geometrical shapes. The experiences of the internal student and the distant student should have equivalent value even though these experiences might be very different.

- (b) Learning experience. A learning experience is anything that happens to the student to promote learning. Students in different locations may require a different mix of learning experiences. Instructional design procedures should attempt to anticipate and provide the collection of experiences that will be most suitable for each student or group of students.
- (c) Appropriate application. The idea of appropriate application implies that learning experiences suitable to the needs of the individual student and the learning situation should be available and that the availability of learning experiences should be proper and timely.
- (d) Students. Students are the ones involved in the formal, institutionally based learning activity in the course or unit of instruction. Students should be defined by their enrollment in a course, not by their location. They necessarily seek institutionally-based education, sanctioned by a recognized and accredited organization.
- (e) Outcomes. Finally, the outcomes of a learning experience are those obvious, measurable, and significant changes that occur cognitively and effectively in students because of their participation in the course or unit.

The concept of equivalency is central to the widespread acceptance of distance education. If lecturers, students, and the public in general identify learning at a distance as the equivalent of what they consider to be traditional learning, distance learning will become mainstream. If equivalency is not what the public perceives, distance education will continue to be peripheral to the field of education (Simonson *et al.* 1999:8).

The changing and diverse environment in which distance education is practiced has inhibited the development of a single theory upon which to base practice and research. A variety of theories have been proposed to describe traditional distance education. They include theories that emphasize independence and autonomy of the student, industrialization of teaching, and interaction and communication. These classical theories emphasize the notion that distance education is a fundamentally different form of education. However, according to Simonson et al. (1999:9), recent emerging theories, based on the capabilities of new interactive telecommunications-based audio and video systems, suggest that distance education may not be a distinct field of education. Both the utilization of existing educational theory and the creation of equivalent experiences for the distance local student are emphasized. Classical distance education theorists need to address the challenges of distance education which is facilitated by new technologies. Advocates of new theories must consider the relationship of these to the traditional strengths of distance education. For example, the new theories' focus on face-to-face instruction eliminates the advantage of time independent learning that traditional theories of distance education value. The debate of these theoretical issues will only increase in the face of continued technological change.

The theory of equivalency relates very well to this study which focuses on the management of distance teacher education in Zambia. The teachers that are trained through distance education should be as good as those who are trained through the conventional way or even better as long as distance teacher education programmes are well managed.

2.6 Classification of management of distance education models based on their centredness

While reviewing academic research and theoretical literature, it was found that the phenomenon of management of distance teacher education underlies a lot of controversy, complexity, and multi-dimensional approaches. A number of different classifications of models exist and the most comprehensive ones are probably those proposed by Joyce and Weil (1972) and Bertrand (1979) (in Rumble 1986: 27). These educational models can be categorised into three groups,

namely institution-centred models, person-centred models and society centred models (Rumble 1986: 27).

2.6.1 Institution-centred models

The main feature of institution-centred models is that they maximise the effectiveness and efficiency of the educational practice of institutions. All views that basically regard learning as processing, storage, and retrieval of new information, including a behavioural approach which focuses on learnt human behaviour which remains uninfluenced by people's thoughts and feelings, fall into this category. They are characterized by lecturer-student separation, media use and privatization (Keegan 1986:37).

2.6.2 Person-centred models

In contrast to institution centred models, person-centred models analyse education from a humanistic point of view. They focus on individual growth, individual learning experiences as well as the motivation of the young student. Person-centred models are characterized by high use of one-way media and no communication with mentors (Keegan 1986:37).

2.6.3 Society-centred models

Models which deal with social action and social interaction approaches and aim at improving the local community and institutions are referred to as society-centred models. Society-centred models also use two-way communication and group learning. However, they rely more on two-way and group communication than on the media.

These models relate to this study concerning management of distance teacher education in Zambia because they focus on educational institutions, individual students and the society or community. The concept of institution-centred models will guide the researcher to find out if management of distance teacher education includes salient aspects of distance education while person-centred models which focus on individual students will help the researcher to deal with

distance education aspects that motivate distance students to continue and complete their studies. The characteristics of society-centred models will assist the researcher identify aspects which can improve the interaction between lecturers and students. Generally, these models relate to this study because it is aimed at improving the efficiency of distance teacher education institutions.

2.7 Summary

This chapter has discussed in detail the theories of student retention or attrition, interaction, student autonomy and independence, and equivalency which underpin this study. They were chosen as they guided the researcher in conducting this study on the management of distance teacher education in Zambia. It has been noted in the discussion of these theories that the development of new distance education technologies has resulted in the view that distance education should not necessarily be viewed as an alternative method of education delivery, but as an education delivery mode that is as good as a conventional method of education delivery or perhaps even better. Through various information communication technologies, distance students can often interact with their lecturers and fellow students anywhere in the world and at any time.

The implication of student interactive and student autonomy and independence theories is that in the absence of lecturer-student interaction, distance teacher education rely to a greater extent on student autonomy. Distance education practitioners should, therefore, understand student autonomy in order to improve the management of distance teacher education in Zambia. The theory of retention or attrition shows that it is important to motivate distance students in order for them to continue learning and consequently complete their studies. The theory of equivalency urges people to regard learning at a distance as the equivalent of traditional learning, and that distance education can help Zambia and other countries increase access to education in line with the Millennium Development Goals.

The classification of the management of distance education models based on their centredness showed that institution-centred, person-centred as well as society-centred views are also underpinning this study because it is aimed at improving the efficiency of distance teacher training institutions in Zambia, acknowledging the independency of the student and uplifting the Zambian nation.

In chapter three, the researcher will focus on the literature related to this study.

CHAPTER 3 LITERATURE REVIEW

3.1 Introduction

The purpose of this literature review is to scrutinise other studies that are related to the topic under investigation. In this study, the literature is purposely searched and selected on the basis of relevance to the factors influencing the management of distance teacher education. According to Jenkins (1989:41), distance education figures prominently among strategies proposed to help African countries escape from education crisis. Many learning institutions in Africa, for example, Botswana, Zimbabwe, Nigeria and South Africa have already made use of distance education. This has improved access to formal education. This chapter explores various views and research findings regarding management of distance teacher education and distance education in general.

Some of the issues that will be dealt with in this chapter are the management of distance teacher education, definitions of distance education, links between management of distance teacher education and quality education, background information about the educational institutions that offer distance teacher education programmes in Zambia, student support services, channels of communication in distance teacher education, factors hindering effective management of distance teacher education and ways of enhancing distance teacher education in Zambia. A main thrust of this chapter is the discussion of salient aspects pertaining to the proper management of distance education at tertiary educational institutions where possible these were focused on in terms of distance education for teachers in Zambia. This literature study enabled the researcher to ask relevant key questions during the interviews and to put the answers of the interviewees into context.

3.2 Management in distance education

Effective management, including administration, needs not only competent staff, but also well-designed, efficient administrative systems and routines, planning and monitoring systems,

budgetary and accounting systems. Many of these will be quite different from the corresponding systems needed in the management of other forms of education.

Management skills are therefore, necessary for effective management of an educational programme, especially those programmes managed through distance education. According to Panda (2006:121), one of the reasons that has made distance education tremendously successful in meeting the needs of the greater majority of people, is the fact that the planning and management of all the complex activities and operation within distance education are well structured to lead to visible outcomes which all can see and appreciate. This section looks at management and administration as interrelated concepts even though some scholars differentiate between the two concepts in the sense that they consider administration to do managerial tasks at a higher level (Silumesii 2003:9). The Commonwealth (1993:12) looks at administration as implementation of the policies, procedures, rules and regulations as set up by the management (see section 3.2). A reason why management and administration are considered to be interrelated is that their definitions are often quite similar. In this regard, one can mention that Kasambira (1998:1) defines administration as a process of working with and through others to accomplish organizational goals efficiently, which in fact corresponds closely with basic definitions of management (Blandford 1997:58).

Before considering the management of distance education institutions *per se*, it is important to again visit the meaning of the concept of management. "Broadly, management is the art of guiding actions and controlling situations in a manner that yields results that best meet the objectives of the institution" (Panda 2006:66). By implication, it means that distance education practitioners should continuously strive to improve the quality of education through distance education. The leadership provided to the institution is a crucial factor in management.

Management in an organisation involves planning, designing, initiating actions, monitoring activities and demanding results on the basis of allocated resources. Blandford (1997:1) provides the definition of the principles of management, which encompass planning, resourcing, controlling, organizing, leading and evaluating. These are considered to be critical managerial processes. According to Nyongesa (2007:2) and Wango (2009:2), management is the science

and art of mobilising and organising human, financial and material resources in order to achieve organizational goals and objectives in terms of goods and services. This interpretation of the concept of management presupposes that one cannot manage anything unless he or she mobilises the resources and organises them to produce goods and services that must meet acceptable standards in terms of quality and quantity as reflected in the set objectives of the organization. Rumble (1986:161) defines management as the judicious use of means to accomplish an end. He further defines it as an activity involving responsibility for getting things done through people. Distance education institutions can be effective if they are run by qualified distance education managers.

Distance education practitioners need management skills in areas such as instructional design and development, student support services, and student assessment. Indeed, as long as there are distance education institutions, there will be need for distance education practitioners and as long as they are needed, their development should be as effective as possible. Distance education practitioners and other education managers in the *Ministry of Education* should ensure that programmes that aim at enhancing the professional capacity of teachers are well managed. MOE (1996:115) states that a vital education system is not static, but dynamic, promoting change, in response to the needs and expectations of society, in such matters as subject content, pedagogical approaches, pastoral care for students, assessment procedures, institutional organization and management and relationships which include other stakeholders. Developments in all of these aspects are under way in Zambia's learning institutions, especially those institutions dealing with open and distance learning.

This evidence points to a clear need for training and professional development of distance education practitioners. Distance education practitioners need to be equipped with the capacity to deal with and incorporate these changes into their professional activities so that the planned educational benefits may follow.

Silumesii (2003:7) considers the following administrative tasks as essential for all effectively managed institutions: identifying, maintaining, motivating, controlling and unifying formal and informal organised groups of human, financial and material resources within an integrated

system designed specifically to achieve predetermined goals and objectives. These tasks are very important in implementing distance teacher education programmes, particularly when dealing with issues of student support.

3.3 The concept of distance education

Distance education may be a new phenomenon in the developing economies but is certainly not new in the field of education in developed economies such as the USA and the UK. In fact, distance education can be traced back to the late 1800's when correspondence courses were first introduced in 1840 by Sir Isaac Pitman who taught shorthand via postal mail. Nowadays, there is vast and rapid growth of distance learning at all levels of education to the extent that it moves from being a marginal to becoming an integral part of the overall educational and training provision (Ibrahim 2006:1). This means that a significant number of people in the world today receive their education through distance education programmes. Since its inception, authors of distance education have tried to define distance education.

According to Louw (2007:34), distance education is a multi-dimensional system aimed at bridging the time, geographical and transactional distance between student and institution, student and lecturer, student and peers, and student and material. Learning and teaching are facilitated in a manner that accommodates the needs of students by combining a number of delivery options to facilitate flexibility, optimizing effective access to and participation in Higher Education, and enhancing the engagement and autonomy of the student. These processes depend on effective communication through face-to-face and digital means and are guided by properly integrated course design in which the various learning resources and support functions complement each other in such a way that they foster effective learning.

Sherry (1996:2) describes distance education or distance learning as a separation of teacher and student in space and/or time. The student is physically separated from the learning institution. The student will receive printed study material in the form of study guides. Keegan (1980:1) and Chikuya (2007:8) define distance education as an education which covers various forms of study at all levels which are not under continuous and immediate supervision of tutors present with

students in a lecture room or in the same premises. According to him however, the students may benefit from the planning, guidance and tuition provided during contact sessions.

Rumble (1986:7) states that the term 'distance' defines the nature and degree of separation of lecturer and student in the educational process. He regards the separation in space and time of teaching and learning as a basic feature of distance education. Similarly, Paul (1990:50) defines distance education as a modality which permits the delivery of a group of didactic media without the necessity of regular class participation. The individual is responsible for his or her learning.

Keegan (1980:1) explains that:

distance teaching/education is a method of imparting knowledge, skills and attitudes which is rationalized by the application of division of labour and organisational principles as well as by the extensive use of technical media, especially for the purpose of reproducing high quality teaching material which makes it possible to instruct great numbers of students at the same time wherever they live. It is an industrialized form of teaching and learning.

As was stated, distance education is defined as an education that takes place when the teacher or lecturer and the student are separated by space and/or time. The gap between the two can be bridged through the use of technology – such as audiotapes, videoconferencing, satellite broadcasts and online technology – and/or more traditional delivery methods, such as the postal services (Chiyongo 2006:13).

According to Keegan (1986:34), distance learning and distance teaching, which both form part of distance education, is not the same because distance learning focuses on the learning experience of the student while distance teaching focuses on that which the lecturer communicates to the students. According to Keegan (1986:42), there are six basic defining elements of distance education. They are as follows:

- (a) the separation of lecturer and student which distinguishes it from face-to-face lecturing;
- (b) influence of an educational organisation which distinguishes it from private study;
- (c) the use of technical media, usually print, to unite lecturer and student and carry the educational content;
- (d) the provisional of two-way communication so that the student may benefit from or even initiate dialogue;
- (e) the possibility of occasional meetings for both didactic and socialization purposes; and
- (f) the participation in an industrialized form of education which, if accepted, contains the genus of radical separation of distance education from other forms within the educational spectrum.

The Zambian *Ministry of Education* (1996:79) defines distance education as a form of educational provision in which the student and the lecturer are at some distance from each other most of the time. Instruction is provided mainly through the print medium, but this may be supplemented by other media such as radio, television, a computer network, or residential school. The MOE policy (1996:80) on distance education emphasizes the central importance of distance education for personal development, for updating knowledge and skills, and for overcoming disadvantage suffered during initial education.

The South African Institute for Distance Education (SAIDE) (2001:128) describes distance education as

a set of teaching and learning strategies (or educational methods) that can be used to overcome spatial and temporal separation between educators and students. These methods can be integrated into any educational programme and – potentially – used in any combination with any other teaching and learning strategies.

Furthermore, Louw (2007:26) indicates that as a methodology, Distance Education is generally defined as one in which the students are separated from the instructional base or lecturer, either in space or time, for a significant portion of their learning. According to him, most definitions of Distance Education pay attention to the following characteristics:

- (a) Instructional accreditation, where learning is accredited or certified by some institution or agency.
- (b) Use of a variety of media, including print, radio and television broadcasts, video and audio cassettes, computer-based learning and telecommunications.
- (c) Provision of two-way communication, which allows for tutor-student interaction.
- (d) Possibility of face-to-face meetings for tutorials, student-student interaction, library study, and laboratory or practice sessions.

Characteristics of distance education are important because they enable the reader to identify distance education even if it is presented in various sheds and for different purposes. These characteristics also enhance the readers' understanding and recognition of this learning and teaching strategy.

The above discussion about the definitions of distance education has revealed that it is impossible to provide a comprehensive definition of distance education which is acceptable across the board. What is possible is to identify certain core criteria. Perhaps the most significant criteria in terms of the information is to provide categories to be included in a definition of distance education, and of their use to a researcher engaged in moulding an application model, are: the student, the tutor/counselor, the learning process, the teaching process, the communication process, the learning/teaching material (its design, development, production and distribution), the place, the time, the educational body, and evaluation. All these criteria relating to their application in a distance education model are characterized by their flexibility, computability, user-friendliness and student-centredness. However, their

interpretation is defined and depends on the individual case and educational model in question (Lionarakis 2008:3).

From the above discussion regarding definitions of distance education, one could conclude that distance education is a system, which requires proper methods of communication, structured planning, well-designed courses, and administrative arrangements (see also section 3.2). Rumble (1986:11) explains that distance education needs to be differentiated not only from conventional classroom based education but also from private study at home. It is true that people learn a great deal through their own efforts. But what distinguishes distance teaching from private study at home is that for distance teaching there is an institution that is consciously teaching its students.

Chikuya (2007:15-16) observes that a description which does not highlight the technological advancement related to the development of distance education fails to reflect the technological consciousness of distance education providers which is what seems to make distance education both manageable and relevant to the changing times. However, it should also be recognised that a mere technologically conscious analysis of the development of distance education does not sufficiently describe distance education at any point in time. This realisation calls for various definitions that exhibit a deliberate desire to show that distance education has both technological and semantic characteristics.

From the above information it becomes clear that it is essential that managers of distance education programmes understand the concept of distance education in order for them to have a clear picture of what they manage and how their clients can benefit from the programmes that they pursue. This position is supported by Trinidade *et al.* (2000:4) who say that dealing effectively with distance students requires very sound organisational principles and good implementation, systematic monitoring and timings, regular review of users' comments and criticisms as well as careful analysis of final results.

3.4 The need for distance education

According to Perraton (2000:58-63), the entry of open universities into the field of education between 1970 and 1980 changed the landscape of higher education and created a new mechanism for teacher education. This assisted to empower teacher education delivery systems to the extent that they could manage national programmes for teacher upgrading. The main reason for distance teacher education programmes was to address the problem of teacher shortages. For the purpose of highlighting the importance of distance education, an attempt is made to briefly describe distance education in selected countries, including Zambia. These countries were chosen because they vary culturally and geographically.

3.4.1 The Australian case

Distance education has played a significant role in the provision of teachers in Australia. In 1980 the Hawke government established distance education centres for the purpose of training primary teachers through distance learning in both pre-service and in-service programmes. Universities were later involved in the provision of distance teacher education programmes. By 1990, over 50% of the 22 000 distance students enrolled for degree programmes at more than 48 colleges of advanced learning attached to various universities, were in the field of teacher education (Evans & Nation 1992:3-13).

According to Evans and Nation (1992:3-13), most of the teachers who enrolled for further studies at distance education institutions aimed at upgrading their qualifications in order to overcome a salary barrier or cross over from a primary school teacher to a secondary school teacher status. Graduates who completed teacher programmes were exposed to further education that equipped them with pedagogical and classroom management skills.

Brown and Brown (1994) in Chikuya (2007:47) mention the *Australia Remote Area Teacher Education Programme* (RATEP), that operated by use of open learning networks. The fact that these centres were mainly established to service rural teachers meant that many rural teachers

were engaged in higher education studies. This initiative had a positive effect on the way teachers understood and executed their duties.

3.4.2 The British case

Pimm and Selinger (1995:47-56) explain that the teacher shortages of 1980 in England and Wales compelled the government to extensively fund the *Open University* so that it could develop a part-time distance learning *Post Graduate Certificate of Education* for both primary and secondary school teachers. The first group began classes in 1994. Prescott and Robinson (1993:283-291) point out that teachers who enrolled at the *Open University* were exposed to the theory and practice of teaching and learning. They had academic subjects like Mathematics, English literature and Physics. The assessment was through coursework and written examination. The *Open University* became popular among teachers because of its low tuition charge.

3.4.3 The Indian case

After independence in 1946, India had made tremendous progress in the field of education. Earlier, education had been available only to the elite in society and a large majority of poor and marginalized people therefore remained illiterate. Political considerations have an important role in the expansion of higher education in India. The distance education mode was adopted by many universities to meet the ever-growing demand of people who lacked means to pursue higher education through the regular stream (Ahmed 2010:1).

Indira Gandhi Open University offers further teacher education among other programmes, and is known to use advanced media technology to provide distance education to its clients. Quality assurance of programmes offered emanates from the thorough training of distance education practitioners (Chandiram 1997:29-37).

According to Kanwar and Pillai (2001:273-288), by 1995 the population of students enrolled in open distance education in India had risen to over 200 000 students. This number accounted for

3% of the total enrolment in higher education institutions. The coming in of private institutions after 1990 made student numbers rise sharply.

Most open and distance learning universities in India coordinate communication and collaboration through the *Distance Education Council* (DEC), founded in 1992. The DEC is responsible for the promotion, coordination, and the maintenance of quality and standards (UNESCO 2002:49).

3.4.4 The Brazilian case

Brazil is one of the Latin American countries with clearly stated and outlined distance education programmes. Distance education in Brazil is over sixty years old. Between 1950 and 1960, there were 170 private correspondence institutions which offered distance education at various levels of education delivery (Batista & Oliveira 1998:168-173).

Initially, Brazil used the radio and television services to offer distance education programmes. The introduction of computers in the 1990s improved the efficiency of the delivery process and this prompted Brazil to start using them in teacher education and professional development programmes. Castro and Castro (1998:17) and Harasim (1998:181-201) strongly recommend the use of technology that can be afforded by Latin America as a whole and by Brazil in particular.

Castro and Castro (1998:17) say that "[w]hat is good for the United States is not necessarily good for Latin America. What is good for Latin America is what is affordable for the masses and what compensates for the scarcity of quality teachers". However, Barcia (2001:313-336) advises that it is very important for Brazil to integrate technology advancement in order to widen the horizon of face-to-face communication. He is positive about the use of technologies like CD ROMs, video cassettes and web pages as he strongly believes that such technologies would go a long way in providing diverse ways of communication which he believes generates interactions that are as good as those provided by face-to-face tutoring.

3.4.5 The South African case

According to the *South African Institute of Distance Education* (1993) (in Chikuya 2007:63), distance education is a strategy for meeting new goals in teacher education. Fraser (1993) (in Chikuya 2007:63-64) mentions some factors that have caused distance teacher education to develop rapidly in South Africa: high costs at conventional institutions, political unrest at residential campuses, overcrowding and the raising of academic standards and criteria for admission.

However, Fraser (in Chikuya 2007:63), admits that there are challenges that surround UNISA's distance teacher training programme. He identifies the issue of separation between teacher trainer and trainee during teaching practice sessions and the failure of learning material in establishing an interpersonal relationship with the student as some of the serious setbacks of distance teacher education in South Africa.

Contact or face–to–face has been and is still viewed widely as real education. Although it seems to work well, it limits the potential to accommodate the growing, global need for higher education, especially considering the demands for life-long learning. To facilitate increased access and life-long learning, distance education options have grown in importance. Louw (2007:21) says:

In 2003, the South African Universities Vice Chancellors' Association's ODL working group stated that Distance Education, as currently understood, should not be equated with correspondence education. The committee makes reference to the fact that significant change in the approach to Distance Education has led to correspondence education becoming outmoded, and it being replaced with a spectrum of options that have changed approaches to learning and learning facilitation radically.

There are many reasons why people study through distance education. They include the following (UNISA 1997:18-19):

- (a) Some people had to leave school early but they still want to continue learning;
- (b) Some people are working and cannot afford to give up their job to attend a face-to-face institution;
- (c) It usually costs less to study through distance education than it does to attend a face-to-face institution;
- (d) Some students have family commitments and are not able to attend a face-to-face institution;
- (e) Some students want to improve their qualifications while they work, in order to improve their performance, get a better job or a promotion;
- (f) Some students live very far from a face-to-face institution but they are still able to study if they do it through distance education; and
- (g) Some students work shifts or have other awkward working hours and distance education suits them better than attending classes.

3.4.6 The Zambian case

Generally, the pyramidal structure of education and training provision in Zambia persists. The system continues to have large numbers of students at the bottom who are sifted and dropped as they progress upwards. It is estimated that out of 300,000 school leavers only 14,000 are accepted for Technical Education, Vocation and Entrepreneurship Training (TEVET) related programmes. The *University of Zambia* admits only 5% from the 10,000 applicants annually. Other public and private universities admit only a small number (Mwansa 2010:v).

In Zambia and other developing countries, there are many people who are not in school, college or university but are willing to learn. In this regard, the *United Nations Children's Fund* (UNICEF) (2010:18) "estimates that more than 100 million children of primary school age were

out of school in 2008, 52 per cent of them girls. Eastern and Southern Africa contributed 19 million children."

Chifwepa (2006:40) explains that

[a]s well as meeting the needs of those who are out of school, college or university age, but unable to attend these institutions for initial education, distance education is well suited to the needs of adults who for social, economic or educational reasons missed out on the opportunities available through initial education, or who wish to retain or update themselves, or study for personal interest and enjoyment.

In Zambia, distance education has been in existence since the 1940s when two private correspondence schools, namely the *Rapid Results College* and the *Central African Correspondence College* offered tuition leading to senior secondary school examinations. In 1964 the government established the *National Correspondence College* which became *College for Distance Education* in 2000 (Mwansa 2010:5) which offered basic and secondary education.

The *College for Distance Education* used to prepare materials which were sent to students by post (Mwansa 2010:5). Students would study and do the exercises. Some of the exercises where sent to college for marking. Students were then allowed to write examinations. In this way, many Zambians who had dropped out of school would continue with their studies. Similarly, the *University of Zambia* had the correspondence unit which offered various courses by distance.

3.5 Improved access to higher education by means of distance education

It is recognized, worldwide, that equality of opportunities for education should be provided, and that there should be greater access to higher education. According to the World Bank (1994:76), "providing opportunities for participation in higher education is an important element of policies to increase national integration and the representation of traditionally disadvantaged groups in economic and political leadership".

According to Siaciwena (1988:170), admission to higher education institutions has been strictly based on possession of a School Certificate. It is for this reason that the use of distance teaching methods to offer the *General Certificate for Education* (G.C.E.) 'O' level subjects, is considered by this researcher as something which should once again be instituted (see section 3.4.6). In the past, the Zambian *Ministry of Education and Culture*, as it was known in 1988, established a Correspondence Course Unit, which later became known as the *National Correspondence College* in May 1964. It provided secondary level education to out-of-school adults and youths.

The following people who were served by this college can be divided into three groups namely (Siaciwena 1981:17):

- (a) teachers with professional training but lacking the required academic qualifications;
- (b) other adults wanting to pursue academic qualifications leading to certification particularly those in employment who would then take up more responsible jobs in the public and private sectors; and
- (c) primary school leavers who fail to enter the formal secondary school system.

Before the *National Correspondence College* became the *Zambia College for Distance Education* (ZACODE) in 2005 it used printed materials for teaching supported by radio programmes. The college offered courses which covered the following G.C.E 'O' level subjects of the regular secondary curriculum: English, Mathematics, History, Geography, Health, Human biology, Economics and Commerce. At the moment the college only offers courses in modular form for grades 8 and 9 pupils.

Table 3.1 below shows that subjects at G.C.E 'O' level were chosen according to the strength a particular subject had in terms of enabling one to enter higher education institutions or to obtain a better job. English was and still is a compulsory subject for any level and type of education as well as for most of the jobs in the formal sector in Zambia. Therefore, this explains why the majority of students, enrolled in this subject. On the other hand both for the job market and entry

to higher education, commerce did not appear to carry as much weight as subjects such as economics, hence, its low enrollment.

Table 3.1: Choice of G.C.E. subjects by National Correspondence students in 1978

Subject	Proportion of G.C.E. Students		
	%		
English	32.44		
Human biology	17.35		
Economics	13.30		
History	10.10		
Mathematics	11.44		
Geography	8.84		
Commerce	6.61		

Source: Siaciwena (1988:173)

The Republic of Zambia, *Ministry of Education and Culture* (1982:16) explained the role of *National Correspondence College* in the following statement:

A new trend is emerging with regard to the participation of teachers in correspondence courses. In the past teachers enrolled in large numbers at the junior secondary level ... Teachers have now shifted to G.C.E. 'O' level courses followed by Policemen, Civil Servants and Miners. The Nurses, too, are taking up correspondence courses on a large scale mainly at G.C.E. 'O' level.

The characteristics of students in terms of occupation are shown in Table 3.2.

Table 3.2: Occupations of the National Correspondence College students in 1978

Occupational Category	Junior Secondary (%)	G.C.E. 'O' level
Teachers	6.67	28.35
Civil servants	9.10	19.25
Police officers	7.11	5.97
State enterprise	12.53	14.34

Source: Siaciwena (1988:174)

It is noteworthy that the *National Correspondence College* played a vital role in improving the academic qualifications of Zambians who did not have the opportunity to continue with their studies in the regular schools. According to Table 3.2, the majority of the students were teachers at G.C.E. 'O' level subjects. This means that the *National Correspondence College* enabled teachers and other people to opt for higher education.

In addition to the services provided by the *National Correspondence College*, distance education was provided by the *University of Zambia*. According to Nkosha and Changala (2008:54-56) and Siaciwena (1988:175), the *University of Zambia* made it possible for those who obtained G.C.E. '0' level courses by distance education to study for university qualifications without leaving their jobs. Table 3.3 below shows student enrolments from 1994/2000 at UNZA.

Table 3.3: Distance student enrolments 1994/95 – 1999/2000

Academic	School of Education		School of Humanities		Total				
Year				and Social Sciences					
	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL
1994/95	286	54	340	134	25	159	420	79	499
1995/96	223	40	263	103	15	118	326	55	381
1996/97	179	35	214	82	16	98	261	51	312
1997/98	214	48	262	88	25	113	302	73	375
1998/99	251	71	322	96	26	122	347	97	444
1999/2000	329	110	439	156	40	196	485	150	635

Source: Siaciwena (1999:7)

As Table 3.3 shows there was a decline in student numbers from 1994 to 1997. This is because of the temporary reduction in the annual intake of distance student imposed by the University's 1994 – 1998 Strategic Plan. However, the review of this Plan in March 1997 showed the need to increase student numbers; hence the steady increase in the enrolments since that time (Siaciwena 1998:7).

It is also noteworthy that the number of students in the *School of Education* is more than that of the *School of Humanities and Social Sciences*. As was the case with *National Correspondence College* (see Table 3.2), the majority of these students are teachers. Table 3.4 below indicates UNZA student enrolments since its inception.

Table 3.4: Distance student enrolments 1967/68-2008

Academic Year	Number of Students
1967/68	229
1968/69	246
1969/70	266

1970/71	206		
1971/72	366		
1972/73	438		
1973/74	426		
1974/75	442		
1975/76	363		
1976/77	361		
1977/78	466		
1978/79	550		
1979/80	494		
1980/81	468		
1981/82	Programme suspended		
1982/83	550		
1983/84	559		
1984/85	615		
1985/86	675		
1986/87	631		
1987/88	731		
1988/89	700		
1989/90	701		
1990/91	702		
1991/92	752		
1992/93	865		
1993/94	614		
1994/95	503		
1995/96	386		
1996/97	314		
1997/98	371		
1998/99	444		
1999/2000	635		

2000/01	586
2001/02	888
2002/03	841
2003/04	1,165
2004/05	1,612
2005/06	1,608
2007	1,784
2008	2,034

Source: Nkosha and Changala (2008:55)

The increase in the enrolment figures over the years has not been impressive. Distance education enrolment constituted about 17 percent of the total UNZA enrolment in 2007. In recent years about 10 percent of the distance students are below 25 years indicating a change in the profile of distance students from predominantly mature students to the mixture of old and young students. ODL has, therefore, increasingly become a convenient mode of study among many people, both old and young, as they are able to work and study at the same time (Nkosha and Changala 2008:55-56).

3.6 Links between management of distance teacher education and quality education

Effective management is central to all good distance education practice, principally because the activities involved in developing and teaching distance education programmes differ in key respects from conventional education. Chiyongo (2006:13) explains that the range of activities involved in distance education is wider, and the skills required to develop, produce and deliver courses are more diverse than typically found in conventional education. The administrative structures within which distance education systems operate have a significant influence on the system's management as a whole and on programme effectiveness.

Rumble (1986:102) states that there is no right way of organising a distance education programme. Nevertheless, all programmes need to take into account all of the functions undertaken in a distance education system. Rumble (1986:102) mentions the three basic education functions as follows:

- (a) The preparation of the teaching material;
- (b) The distribution of the teaching material;
- (c) The correction of students' written and practical work.

There are many ways in which an organization can carry out these three basic functions. The common ones are the 'mixed-mode' systems that teach both conventional classroom-based and distance students. However, Rumble (1986:105) argues that the requirements of distance students are likely to be better served if the institution is wholly dedicated to their needs. O'Rourke (1993:22) also notes that

there is a set of linkages required with the administrative staff responsible for logistics of course delivery and student support; with those responsible for acquisition of texts, lab equipment, or other supporting material; with those responsible for setting up tutorial arrangements and recruiting tutors; with the library regarding the level of library service required by the course; with those responsible for organising the final examination or accreditation arrangements.

A flat organisation in which decision-making is shared among a fairly wide group of competent people, in contrast to the hierarchical structure in which a chain of command strictly allocates levels of decision making according to rank, is appropriate for distance education. Furthermore, since one of the goals of distance education is democratization of education, its methods and structures should also permit shared decision making. Indeed, distance education is a method of education delivery which requires good leadership and management (see section 3.2). If distance education is properly managed, the quality of education will also improve.

According to the study undertaken by the Zambian Research and Publications Committee of Nkrumah College of Education on "the impact of distance education on secondary school teacher staffing" at 51 schools of the 7 districts of the Copperbelt province, 263 distance education trained teachers were teaching at the schools, giving an average of 10.3 teachers per school. In addition, out of 215 respondents (Standards Officers, District Education Board Secretaries, Head Teachers, and Heads of Departments), 196 (96%) said that the distance education trained teachers were competent ((Nkrumah College of Education 2007:1)). The study also revealed that distance trained teachers performed well in diploma examinations at dual mode institutions where distance and full-time students write the same examinations. Distance education (which is a complete departure from the traditional face-to-face method of delivering education) is a good method as long as it is well managed.

3.7 The management of distance teacher education in selected Zambian institutions

Distance education involves a lot of work on the part of both the institution that offer programmes and the students. An effective distance teacher education programme requires planning, organisation and controlling of the development, production, distribution and the use of the various forms of media. This is a challenging task for the managers of distance teacher education in Zambia. Since students are physically separated from the educational institution and their lecturers, the challenges to management are many and require strong foundation. In advocacy of a holistic approach to the management of distance education, the Zambian author, Chifwepa (2006:38) supports Holmberg's (1989) view that suggests a system's approach which involves seven most essential components:

- (a) Planning;
- (b) Developing course materials;
- (c) Catering for instructional communication;
- (d) Counselling students;

- (e) Administering course development, course material distribution, and communication, etc;
- (f) Creating a suitable organizational structure for distance education; and
- (g) Evaluating the functioning of the system.

In Zambia, the educational institutions which have been associated with issues related to management of distance teacher education for quite some time are UNZA, ZAOU, NISTCOL, NCE and COSETCO (see section 1.2).

3.7.1 UNZA

Siaciwena (1999:1) states that during the pre-independence period in Zambia opportunities for education and training for indigenous Africans were inadequate. Consequently, the severe shortage of human resources constituted a major constraint on the country's development at independence in 1964. This shortage meant that Zambians with lower formal qualifications than required had to be recruited to fill vacant positions left by expatriates, especially in the public service. On-the-job-training was a necessity.

A more realistic and permanent solution was to create and expand opportunities for higher education. In March 1963, the government appointed a commission chaired by Sir John Lockwood, a former Vice Chancellor of the *University of London*, to assess the feasibility of a university in what was then Northern Rhodesia.

The *Report of the Lockwood Commission* that was submitted to the government in 1963 led to the establishment of the *University of Zambia* in 1966, determined, to a great extent, the structure and pattern of development of the university particularly with regard to continuing and distance education. It stated in Kabwasa and Kaunda (1973:80-81), in part, the following:

If the aim of providing wide opportunities for higher studies is to be fully realized, it would be wrong to limit the activities of the University and its contribution to the advancement of the people by restricting formal association

with the university to those who spend several years of full-time or part-time study on the campus.... It is, therefore, of the greatest importance that the regulations of the University should allow its examinations for degrees and other qualifications to be open to candidates who have pursued their studies externally.

According to Akakandelwa (2007:15-16), following the dissolution of the Federation of Rhodesia and Nyasaland in 1963 and with the approaching independence, the *African Council on Education* and the *British Inter-University Council for Higher Education Overseas*, made a number of recommendations in relation to the development of the university. Among the recommendations in the report on the development of a university was the need for the university to throw open its degrees and other awards to private students working externally and to set up correspondence courses and advisory extramural extension services to assist such students. This recommendation was accepted. Chifwepa (2006:2-3) states that

since its inauguration in 1966, the University of Zambia has adopted various means of delivering university education. The programmes and means of delivery include the distance education mode which aims at providing university education to those who missed it after their school and those who may be working but wanting to study without being in full-time. The students in this mode undertake most of their study without having to attend regular classes.

The establishment of the distance education at UNZA was therefore, as a result of the *Lockwood Commission Report* which recommended that degree courses by correspondence should be made available to people of Zambia who may not be able to enroll for the full-time studies. However, a separate department was recommended to coordinate and administer such courses (Chifwepa 2006:3). According to the *Directorate of Distance Education Student Handbook* (2008:3), the organization, administration and coordination of distance learning courses is the responsibility of the *Directorate of Distance Education*, but all tuition is given by members of academic staff of the various schools of study.

This means that UNZA began developing distance teacher education programmes since its inception in March, 1966. According to Siaciwena (2007:2), distance learning courses at UNZA were launched in 1967. It was hoped that UNZA would reach a relatively large pool of students with little additional cost by comparison to enrolment in full-time study programmes.

The *Directorate of Distance Education* (2003) (in Chifwepa 2006:3) noted that about 18,000 students were enrolled as distance education students between 1967 and 2003. Table 3.5 below shows the latest trend of enrolments from 2000 to 2008 (also see Table 3.4).

Table 3.5: Trend of enrolments from 2000 to 2008

Academic year	Total Initial Enrolment of distance students
2000/01	586
2001/02	888
2002/03	841
2003/04	1,165
2004/05	1,612
2005/06	1,608
2007	1,784
2008	2,034

Source: Nkosha and Changala (2008:55)

The *University of Zambia* adopted its model of distance education from the *University of New England*, Australia. It is characterized by the integration of distance learning activities into the regular academic functions of teaching departments in the university. It has a dual structure in which curriculum development, all teaching and assessment are the responsibility of full time teaching staff in various departments that offer courses through distance teaching while a separate administrative unit, the *Directorate of Distance Education*, is responsible for the overall coordination and administration of all distance learning courses. The organizational structure of the *Directorate of Distance Education* is shown in Figure 3.3.

DIRECTOR Lecture/ Co-ordinator Lecture/ Co-ordinator Lecture/ Co-ordinator **Student Services** Research & Evaluation (Course Materials) Assistant Management Secretary Registrar Senior Admin. Officer Senior Admin. Officer - Registry (1) - Course Materials (1) Administrative Computer Room Officer (1) Supervisor (1) Administrative Officer (1) Junior Admin. Officer (1) Stenographers/Clerk Junior Admin. Officer Typists (5) (1) Clerical officers (4) Clerical officers (5) Messenger (1) Machine Operator (1)

Figure 3.3: Organisational structure of DDE at UNZA

Source: DDE Student Handbook 2008:10

The *Directorate of Distance Education* provides support to distance teaching staff particularly in the area of instructional design, and liaises with all schools and relevant units involved in the management of the distance education programmes on all matters relating to distance education in the university (Siaciwena 2007:5). Figure 3.4 below shows the organisational structure of UNZA. This structure does not include some administrative units such as that of the Registrar.

Central Administration
(Headed by the Vice Chancellor)

Library
(Headed by the University
Librarian

Directorates
(Headed by Deans)

Departments
(Headed by a Head)

Lecturers

Resident lecturers
(in provinces)

Figure 3.4: Organisational structure of UNZA

Source: Chifwepa (2006: 6)

Chifwepa (2006:8) notes that the *Directorate of Distance Education* does not have lecturers of its own. Lecturers who teach distance students are from other departments of the university. It is therefore difficult for the *Directorate of Distance Education* to exercise disciplinary measures on lecturers for failure to meet their obligations.

Apart from the *Diploma in Adult Education* (DAE) that is offered entirely through distance education mode, students registered for most degree programmes (including programmes in Education) have to transfer to full-time for their third and fourth year-level courses because these are not available through the distance education mode. However, UNZA (2001) (in Chifwepa 2006:4-5) indicates that there are plans to expand the programme further so that students will be able to complete their studies through distance education, thereby increasing enrolment from 500 to 2000.

3.7.2 ZAOU

The Zambian Open University is an open distance education institution that utilizes mainly print media supplemented by informal tutorial groups and face-to-face residential tutorials. The university has a Board of Directors comprising a Chairperson, Secretary/Treasurer and four other members. The Senate consists of all Deans of teaching units, ten representatives of the academic staff at all levels, two representatives of students and a representative of business and industry. The management of day to day affairs of the university is done by the Vice Chancellor, Deans, Registrar, Bursar and the Librarian (ZAOU 2007:8-9).

The ZAOU headquarters is in Lusaka. The university does not have a fully fledged library (ZAOU 2007:12). In order to obtain high results and to provide quality education, the university hires competent and qualified lecturers and professors, most of them on part time basis. Table 3.6 below indicates enrolment figures of students from 2005 to 2009.

Table 3.6: Enrolment from 2005 to 2009

Academic Year	Number of students	
2005	369	
2006	1,131	
2007	2,000	
2008	1,359	
2009	2,158	

Source: ZAOU Prospectus (2009:19)

Table 3.6 shows that the enrolment figures have been increasing from the time the university was established in 2005. The decision about entrance requirements is entirely at the discretion of the university. The university sets minimum entrance requirements for each degree programme. In addition, the university spells out specific requirements for individual programmes. In every case, the minimum entrance requirements are five 'O' Levels. Other qualifications are diplomas taken from other high institutions. Foreign qualifications are assessed against the stipulated entry requirements (ZAOU 2009:19).

3.7.3 NISTCOL

The college started offering distance teacher education programmes in 1998. The first distance teacher education programme was the STDDL (see section 1.2). The college adopted its model of distance education from the *University of Zambia*. The distance learning activities are integrated in the regular academic functions of the teaching departments. The full-time staff is responsible for curriculum development, all teaching and assessment.

However, the college has a *Department of Distance Education* headed by a full-time Head of Department. The Head of Department and a few lecturers attached to that department manage day to day affairs of the department. Currently, the college has the following three distance teacher education programmes: The *Secondary Teachers' Diploma through Distance Learning*, the *Primary Teachers' Diploma through Distance Learning* and the *Diploma in Education Management*. Table 3.7 below shows enrolment figures of students in the three distance

education programmes from 1998 to 2008. A blank indicates that the college did not enroll students in that programme.

Table 3.7: Enrolment from 1998 to 2008

Academic Year	Number of	Number of	Number of
	students for	students for	students for DEM
	PTDDL	STDDL	
1998		500	
1999			
2000			
2001	2,500	904	
2002			
2003	4,036		
2004		830	
2005			150
2006		1,034	
2007	4,500		
2008		1,200	279

Source: Department of distance education (HOD)

NISTCOL utilizes mainly print media supplemented by informal tutorial groups and compulsory face-to-face residential tutorials held during school holidays. However, the PTDDL is almost offered entirely through distance education and students have only a two to three days wrap-up exercise prior to the examinations.

3.7.4 NCE

The NCE was first established as a college of education in 1966 to train secondary school teachers. The college has been offering the *Secondary Teachers' Diploma through Distance Learning* in addition to full-time *Secondary Teachers' Diploma* for some time now. The institution does not have specific staff for distance education. Distance learning activities are

integrated into the regular academic functions of teaching departments. However, the college has a *Directorate of Distance Education* consisting of lecturers that deal with the coordination and administration of distance learning activities in liaison with the college administration. Table 3.8 below indicates enrolment figures of distance students for 2000, 2005 and 2006. The gap between 2000 and 2005 was due to the fact that the college was not enrolling every year because it wanted students to complete the programme before it accepted new students.

Table 3.8: Enrolment for 2000 and 2005

Academic Year	Number of students	
2000	359	
2005	616	
2006	2,500	

Source: Research and publications Committee (2007:13)

3.7.5 COSETCO

COSETCO was established in 1970 in order to train home economics and science teachers. Like UNZA, NISTCOL and NCE, COSETCO has a dual structure in which curriculum development, and all teaching and assessment are the responsibility of full-time teaching staff in various departments.

This designation is similar to the ethos of distance education as found in Australian universities and colleges of advanced education. Keegan (1986:33) explains that in Australian universities and colleges of advanced education, the same staff have two groups of students, one on-campus, the other external, and they prepare both groups for the same examinations and awards. In fact distance students follow the curriculum of the full-time students. In short, COSETCO practices the dual mode system. According to Trinidade *et al.* (2000:5), the concept dual mode system reflects the coexistence of distance education and the conventional type of educational practice. This solution has been adopted by an increasing number of traditional universities as a means to

provide education to students who cannot follow courses regularly on campus due to some reasons such as family commitments.

At COSETCO there is a *Directorate of Distance Education* composed of lecturers which is in charge of the coordination and administration of the affairs of distance students. This directorate, however, works closely with the college management.

Table 3.9 below indicates enrolment figures of distance students for 2000, 2005 and 2006. Just like *Nkrumah College of Education* (see section 3.7.4), the gap between 2000 and 2005 was due to the fact that the college was not enrolling every year, but only once registered students had completed their programme.

Table 3.9 Enrolment for 2000 and 2005

Academic Year	Number of students
2000	274
2005	491
2006	850

Source: Research and Publications Committee (2007:13)

3.8 Salient criteria for effective management at distance teacher education institutions

In this section important criteria for effective teaching and learning at distance teacher education institutions that were identified by means of an extended literature study will be highlighted. These criteria are: capacity building, motivating distance students, effective distance support mechanisms, acceptable quality of distance education modules and other print materials, and relevant modes of communication.

3.8.1 Capacity building in distance teacher education

Continuing Professional Development (CPD) is essentially concerned with realizing the potential of each staff member to be effective, successful, creative and to take bold initiatives in their work to the benefit of their clients, their colleagues, their institution and their own career development (Partington & Stainton 2003:1). This relates very well with the point that Brophy (2000:91) and Peters (1990:127) have repeatedly made, namely that the work force in any organization is its principal asset. Peters recommends that training should become a corporate obsession.

CPD is relevant for employees who have been with an organization for some time. It may centre on work related themes as well as things related to work activities to directly or indirectly improve efficiency. Clear objectives are associated with successful CPD (see section 5.2.1).

Jordan and Lloyd (2002:160) state that appraisal is a process by which every member of staff has a meeting at least once a year with his or her supervisor. It provides an opportunity for the employee to ask for support. During the implementation of CPD individual strengths of employees can be identified so that they can be extended, and weaknesses can be highlighted in order to eliminate them. Siaciwena *et al.* (2005:5) acknowledge the importance of CPD programmes in distance education institutions. The purpose for in-service education or staff development is to provide ongoing programmes and services designed to explore new developments in education (Fitch *et al.* 1990:15).

According to Eraut (1994:25), one main purpose of CPD is to bring practicing professionals into contact with new knowledge and ideas. This is considered in terms of general updating, a stimulus to critical thinking and self-evaluation, the dissemination of a particular innovation, and as part of the process of implementing a new mandatory policy. In this regard, MOE (1992:91), for example, decided that high priority should be given to the professional and administrative development of education managers. MOE (1977:66) is clear in its view that heads of institutions and others in supervisory capacity should attend in-service training programmes and that the responsibility of staff development should be shared between the employee and the employer. CPD implies advantages for both the employee and the organisation in the form of

improved performance and effectiveness in the work place and satisfaction experienced by the employees.

Staff development in education has many facets, as is evident from the numerous terms found in the literature (Webb *et al.* 1994:234). Such terms include in-service training, professional growth, continuing education, on-the-job training, human resource development and staff improvement. Historically, staff development has been a reactive programme (Webb *et al.* 1994:234). The inadequacy in the preparation of teachers before 1900 and for many years subsequently has necessitated major remediation programmes. Despite possible inadequacies, it is important that staff development should be proactive (Webb *et al.* 1994:234). The emphasis should be on the ongoing professional development of the individual. Staff development should therefore place more emphasis on the extension of personal strengths than on the remediation of personal weaknesses.

Staff development and in-service training are frequently used interchangeably. However, (Guthrie & Reed 1986:346) state that staff development is an ongoing professional development of an individual. Distance education practitioners should further their education management skills through good quality continuous distance education programmes. The use of the term staff development has gained prominence recently and has taken on an amalgam of meanings. For example, staff development is concerned with realizing the potential of each staff member to be effective, successful and creative in their work to the benefit of their clients, organisation and themselves (Wideen *et al.* 1987:2).

The bulk of the lecturers and tutors who are involved in distance education in Zambia come from traditional institutions. They are not trained distance education practitioners, and their attitudes towards distance education are not much different from the rest of the people who look at distance education as a second-class form of education (Ibrahim 2006:10). To overcome this problem, it is important to guarantee the high quality of distance education programmes by equipping those who conduct and run distance education courses with appropriate skills such as computer and management skills. This will ensure the suitability of the programmes to Zambian students. According to Erasmus and Van Dyk (1996:3), training can be regarded as a systematic

and planned process to change the knowledge, skills and behaviour of employees in such a way that organisational objectives are achieved. The manager's responsibility is to manage the training function in such a way that the set objectives are achieved.

Siaciwena (2007:32) explains that staff development in distance education is very important. Hence, in 2000 the *Senate Distance Education Committee* at UNZA decided that staff should be an integral part of distance education and that staff development programmes for all categories of staff involved in distance teaching should be developed. This decision was arrived at in order to improve the professional capacity of those who were working in the *Directorate of Distance Education*. The directorate is composed of academic staff, administrative staff and materials production staff.

In traditional education, lecturers interact directly with their students. They prepare their own support materials, such as schemes of work, lesson notes and tests. In short, they are autonomous within their classroom. In contrast, lecturers involved in distance education are not in direct contact with their students. Additionally, there are many people involved in the successful completion of an educational task. For instance, Sherry (1996:14) observes that communication in distance education is mediated not only by the technology but also by a host of team partners which may include editors, designers, production technicians, media specialists, local tutors, aides, site facilitators and service providers. These people require ongoing training in the form of observation of master distance education practitioners. They need training in material production and chances to network with other lecturers and facilitators. In order for the distance teacher education programme to be successful, there is need for team work among the distance education practitioners.

Schlosser and Anderson (1994: 32-37) identify the new skills which lecturers must learn before they assume the role of distance educators:

- (a) understanding the nature and philosophy of distance education;
- (b) identifying student characteristics at distance sites;

- (c) designing and developing interactive courseware to suit each new technology;
- (d) adapting teaching strategies to deliver instruction at a distance;
- (e) organising instructional resources in a format suitable for independent students;
- (f) training and practice in the use of telecommunications system;
- (g) becoming involved in organisation, collaborative planning, and decision-making;
- (h) evaluating student achievement, attitudes, and perceptions at distant site; and
- (i) dealing with copyright issues.

Lecturers also need support when they are learning about new technology or strategies regardless of their level of classroom experience. For example, some lecturers feel intimidated by equipment such as computers the first time they begin to use them. At this point, they need basic computer lessons to be able to communicate with other lecturers who are computer literate. It is important that distance education practitioners learn about Information Technology (IT) which has become an influential factor in nearly every aspect of our society. Understanding IT, its components and language has also become a requirement for personal and professional growth and success (Ramalibana 2005:46). Lecturers who are familiar with IT are able to communicate with their students via e-mail. Students who have access to internet can send their assignments through e-mail. Diallo (2009:1-2) notes that the potential of IT in education justifies the increased interests of African governments, education institutions, and development partners to mainstream ITs in educational policies and higher education practices. ITs have the potential to improve the quality of teaching and learning. Therefore, there is a need to have distance education practitioners who are conversant with ITs.

Sherry (1996:19) states that a distance education delivery team requires well-trained individuals in addition to teachers, site facilitators and administrators. The research findings of Hara and Kling (1999:2-23), conducted at a major US university, revealed that technical problems were

common among the people who had no access to computers or those with limited computer skills. Lack of familiarity with equipment and the nature of online searching, left students who spent most of the time attempting to complete assignments frustrated. The other major frustration was the lack of immediate feedback from the lecturers. The implication of this is that staff development in the area of new technologies and student support is necessary in ensuring that distance teacher education programmes are successful.

Research conducted by Ingesman (1996) (in Usun 2003:3) on a distance teacher training course that was developed to enable distance education practitioners develop and run courses at a distance by using computer conferencing systems or general electronic communications, shows that teacher training in developed countries make use of two way interactive technologies. This actually confirms the idea that staff involved in distance education should be equipped with knowledge and skills required in the management of distance teacher education.

O'Rourke (1993:5) notes that while print will remain an important medium in distance education, the increasing use of other media may change approaches to distance education. In fact, approaches to distance education are already changing. As indicated above, developed countries are generally using two-way interactive modes. As video and audio techniques and equipment become simpler and more affordable, it is very likely there will be a trend away from the production style of broadcast standards to a different approach which is less formal. For instance, there are programmes that are available on-line where learning material is not printed but available on computer. This shift from one approach to another requires some knowledge and skills which can be gained through continuing professional development.

3.8.2 *Motivation of distance students*

Motivation can be described as the process whereby an individual is given the opportunity to satisfy his or her needs by pursuing certain objectives. In other words, the process of motivation involves the creation and sustenance of the desire to work for certain goals among the people in an organisation (Management Services Board 2003:2). Distance learning can be a very isolating experience. Those managing distance education programmes must motivate not only academic

and non-academic staff, but also students. One of the seven background assumptions of the theory of interaction and communication (see section 2.3) is that strong student motivation facilitates learning (Simonson *et al.* 2006:46). In distance education this is important because it reduces attrition and increases the retention rate (see section 2.2).

The subject of motivation is of major importance in distance learning. Prompt feedback is very important to students for increasing understanding as well as motivation to complete a distance programme/course. At every level of course design, course development, and course delivery, a variety of strategies need to be incorporated to optimally assist students and thereby motivating them. In this regard, Gearhart (2010:14-15) noted that "immediate or prompt feedback is a key factor in keeping students engaged in learning, because delayed lesson feedback can interfere with the process to the extent that learning may not actually take place".

The implications for the managers of distance teacher education are that they need to have the general knowledge of the requirements of the staff and students. The understanding of their staff and students provides the basis on which the needs of individuals may be linked to the needs or objectives of the distance learning institution (Scottish Education Department 1990:45). Baath (1982:22) advises that distance students need special help when they begin their studies in order to promote their motivation for studies. Indeed, distance students need to be motivated by distance education practitioners.

3.8.3 Student support mechanisms in distance education

This aspect is clearly linked to the motivation of students (see section 3.8.2). It has to be borne in mind that however well designed self-study materials (modules) may be, distance students will need further support. "The most obvious form of support is that required to solve academic or personal problems, but for students studying in isolation moral support may be equally important" (Melton 2002:13). It is a good idea to develop support systems that are suitable for the distance students. Additional support is needed on a more regular, ongoing basis. Distance students are likely to spend the vast majority of their study time in their homes or in the place of work, and they need regular ongoing support.

Holmberg (2000) and Keegan (1993) (in Trinidade *et al.* 2000:3-4) argue that distance education students require some kind of support mechanism, so that they can overcome their learning difficulties. Different kinds of technological facilities, in terms of the objectives of the course, target populations and available resources are therefore needed. These student support mechanisms include mail, radio, telephone as well as computer mediated communication. The findings of Potter's (1998:60-75) study, which was not only confined to online students concerning student support in distance education, reveals many forms of assistance that are designed to remove barriers (situational, institutional, dispositional and informational) and promote academic success. Examples of such services are pre-admission counselling, academic advising, financial aid, and learning skills.

The above mentioned study also indicates that students' initial experiences were the most significant factors in their experience of distance education. Pre-enrolment information that respondents rated highest include specific and general information about the programme that students intend to pursue, the opportunity to speak to the lecturer (not administrator), textbook procurement, orientation to the library/learning resources and help with the application process. The critical services to be provided by those managing distance education, which Potter's respondents stressed are: high quality materials designed specifically for distance students and sent out in time for the beginning of the course, feedback and encouragement, streamed administration procedures, and registration procedures that work (Potter 1998:75).

However, Potter's study is limited by her survey demographics since her research focused on the traditional distance education population of North America adults, mainly female, and already well-educated (Potter 1998:76). There is clearly a need to conduct research into students' expressed needs especially in developing countries, like Zambia, to ascertain the much needed support that students require. Keegan (1986:202) states that among the requirements for distance education is the provision of student support services. Provision of student support services distinguishes distance education institutions from publishing houses and other producers of learning materials.

The link that is provided between the learning materials which have been developed and the learning that is likely to take place from the materials, is central to the concept of distance education. Peters (1998:13) advises that people who have chosen distance education as a way of improving their academic qualifications are a special group and should be supported. Keegan 1986:202-203) has cited some of the support services as follows:

- (a) availability of the tutor for consultation on an individual course;
- (b) a study centre within easy traveling distance where the student can meet other students and use facilities:
- (c) tutorials at regular intervals;
- (d) computerized student records that can pick up problems in students' progress and anticipate drop-out; and
- (e) face-to-face sessions.

Most adult students need some guidance and help if they are to continue with their studies. In the 19th century the normal way of supporting students was to tell students to attend tutorials and seminars and give them a list of books and articles to read (Rumble 2001:33). Nowadays, instead of the students depending only on the information that the lecturer gives them, they can access a lot of appropriate data on the internet. Ibrahim (2006: 31) indicates that it is the duty of successful institutions to meet the needs of their students, to constantly improve the quality of the educational content, and to use student satisfaction data to mould their directions. It is common sense to note that students who are well supported and are satisfied are likely to complete their programme.

Phillips (1994) (in Siaciwena *et al.* 2005:15), argues that all distance education systems must maintain student records. Well-maintained and easily accessible records are a vital source of information for progress by student cohorts, dropout rates, and examination results. Such

records can also be used to assess the progress of individual students, especially those experiencing learning difficulties. The use of computers is very important in this area.

The findings of the recent evaluation of the *Primary Teachers' Diploma through Distance Learning* (see section 3.7.3) in Zambia conducted by Siaciwena *et al.* (2005:6) include the following:

- (a) There was no consistent system for distributing modules and reports. This frequently made it difficult for students to complete assignments on time.
- (b) The effectiveness of the student support and tutoring system was limited by the low frequency and short duration of contact sessions.
- (c) Some tutors were not conversant with the content of the modules before contact sessions.
- (d) District management teams were not well prepared in terms of knowledge and skills for supporting students.

In general, the programme coordination did not seem to work well and roles and responsibilities were not clear to the stakeholders. Baath (1982:22) advises that distance students need special help when they begin their studies in order to promote their study motivation.

Chifwepa's (2006:32) study about the development of a model plan for the application of information communication technologies in distance education at the *University of Zambia* revealed that UNZA provides administrative support, academic support and counselling to the distance education students. It was through these services that interaction between the students and university staff was promoted.

Student support services are important in breaking the isolation that distance education students experience. Support services also provide encouragement and motivation. For most distance students, support of different kinds helps them stay in the programme until they complete it instead of dropping out or failing. Ibrahim (2006:47) supports the provision of student support

services by indicating that research-based evidence has shown that the support the student receives from those people surrounding him or her has emerged as a major factor affecting persistence. In this regard, student support should be designed to meet the needs of particular groups or individual students (UNISA 1997:13). It is clear that sufficient support for the students would keep them in the programme and ensure that they succeed.

There is no universal blueprint for the design of student support services. According to Tait (2000:290), the various factors that need to be taken into account in the planning of student support in open and distance learning systems include characteristics of students, the demands of academic programmes and courses, the geographical environment, the technological infrastructure, the scale of the programme, and the requirements of management. These factors interact in complex ways, such that while none can be ignored, none can be given overall priority. In developing countries like Zambia, student support may differ from that of developed countries. The student support that is rendered to students in developing countries greatly depends on the needs of the students themselves. For instance, due to financial difficulties students may face, distance education providers might allow students to pay in installments.

Additionally, if distance education practitioners are to contribute positively to quality education, they must focus on providing quality student support services which satisfy the particular learning needs of the institution's students. These student support services include print materials such as modules which are suitable for distance education students. For example, the *Directorate of Distance Education* at UNZA offers a wide range of student support services ranging from pre-course counseling to the administration of examinations. Although these services are provided, mainly from the University in Lusaka, provincial centres, which are superintended by resident lecturers, also provide a variety of student support services (DDE, 2009:5).

3.8.4 Acceptable quality of distance teacher education modules and other printed materials

Print will remain an important medium in distance education despite the increasing use of other media, particularly in developing countries. Picciano (2006:171) says that

the most commonly used technology in distance learning is print. Textbooks, journals, newspapers, syllabi, tutorials, assignments, tests, and papers commonly consist of printed materials. While the demise of the printed word has been predicted as a result of the growth of mass media and the evolution of the electronic age in education, the printed word continues to be alive and well.

According to Siaciwena (2007:27), the system of writing and/or reproducing course materials on an annual basis makes the efficient production and timely delivery of course materials an important indicator of programme performance at UNZA. The *University of South Africa* uses the print medium in addition to new technologies. A student is exposed to various media so that she or he can select the one which suits her or him best (Louw 2007:4).

According to Ibrahim (2006:10), most delivery systems at the Arab open universities are via printed materials. The majority of these printed materials were developed by existing traditional universities to assist students to learn (Rumble 2001:33). The quality of these materials has varied from very poor to exceedingly good. When the *Arab Open University* started teaching in 1971, its materials were seen by many as involving a quantum leap in quality because they were well written. However, they attracted criticism from some people who said that the materials had a lot of aims, objectives and that contents were predetermined by the course designers. This, they said, made the students passive (Rumble 2001:34).

The quality of print materials should be prepared in such a way that they build up the confidence of the students. Some of the distance education students have been out of school for a lengthy period of time or had had a negative experience of schooling. Therefore, materials should be seen to begin where students are and proceed step by step so that students discover that they can succeed (UNISA 1997:15).

3.8.5 Relevant modes of communication in distance teacher education

"Communication occurs when two or more individuals wish to share ideas" (Simonson, Smaldino, Albright & Zvacek, 2006:90). Communication in a distance education environment happens when students interact with one another and with their lecturer. Communication in distance education is possible because students have a lot of things in common. For example, students can share information regarding assignments that are given to them by their lecturers. According Moore (1997:23), channels of communication that connect the lecturer and the students should be appropriate for the student and the lecturer. In other words, the media used to connect the student, lecturer, and learning resources must be capable of conveying all necessary information.

According to Rumble (2001:35), the earliest generation of distance education system relied on postal communication, which was often slow and sometimes unreliable. According to him there is research-based evidence that the elapsed time between the time of submitting the assignment and the receipt of the returned assignment with the tutors comments and marks increases dropout rates significantly.

According to Chifwepa (2006:13), the postal system has been the main medium of communication between students and UNZA. It takes about two weeks for the batches or assignments to reach destination. As regards internet, it was observed that 66% of the distance students did not have access to internet due to distances to possible access points and the cost of using the internet.

Murphy and Collins (1997:4) have recognized dialogue as being a determining factor in the amount of transactional distance that exists in most, if not all, instructional events: those taking place in a traditional classroom and those taking place at a distance where a lecturer or student may never see one another. Transactional distance does, however, not only refer to the physical separation between the lecturer and student but also to the communication gap that must be bridged by dialogue in some structured fashion so that shared meaning can be constructed. In Sub-Saharan Africa (SSA), communication in distance education has been used to widen access

to basic education and to improve quality in the conventional school system through in-service training of teachers (Moore & Kearsley 2005:12).

It is obvious that the nature of each communication medium has a direct impact on the extent and quality of dialogue between lecturer and students. For example, an educational programme in which communication between lecturer and student is solely by an audiotape, or an interactive module, will have no lecturer- student dialogue simply because the media cannot carry messages back from the student to the lecturer. As stated, effective communication is very important in distance education. This is so because the student is physically separated from the lecturers, tutors and peers. This is confirmed by Siaciwena (2007:19) when he argues that UNZA's internal students have an advantage over distance students because they receive face-to-face tuition, attend tutorial meetings and seminars and have easy access to the library. They also have opportunities to interact with their tutors and fellow students informally, and on a regular basis, while distance students are largely isolated and have a number of distractions arising from their intrusive social, family and occupational responsibilities.

Strong distance education programmes often use radio, more specifically, *Interactive Radio Instruction* (IRI). According to Leary and Berge (2007:2), IRI has proved to be one of the strongest and most appropriate forms of communication and teaching for distance education in SSA. However, it is also clear that a variety of delivery systems have worked best for different audiences. Teachers in primary schools and secondary schools, at college level, and continuing education, all require different approaches to distance education. UNISA, for example, which has a current massive enrolment of more than 300,000 students, uses traditional methods in addition to IT. UNISA's traditional approach is appropriate for distance education programmes that have been forced to adapt its delivery mechanisms to the infrastructure in Africa (Leary & Berge 2007:6).

Louw (2007:23) explains that in distance education special care should be taken to create access opportunities and a learning environment supported by appropriate administrative and logistical support services which meet the personal and learning needs of students in their contexts. It is generally recognized that the approach to the curriculum and related learning should be designed

with the understanding that students will for the large part engage materials in isolation from lecturers or other students. International good practice in distance education includes excellent learning materials, face-to-face contact, and the appropriate use of technology and communications systems – all brought together in a properly integrated course design in which the various learning resources complement each other to facilitate learning in an efficient manner.

According to Usun (2003:2), developed countries generally use two-way interactive technologies which include some models and applications such as virtual teacher training and on-line teacher training. The most common distance education technology in teacher training is the internet. According to (Leary & Berge 2007:1), despite the emphasis on print and other forms of delivery, the leading distance education programmes in SSA are constantly finding ways to integrate more ICT into their programmes without abandoning traditional delivery systems. Rumble (2001:32) supports this argument by saying that the development and growth of the World Wide Web/Internet, has ushered in a fourth generation of distance education systems namely that of online or virtual education systems which were referred to before. At the Lisbon Summit on Work and Employment held in March 2000, heads of state and prime ministers of the European Union agreed to introduce ICT at all teaching institutions. This decision was arrived at in order to improve learning and to prepare future citizens for the needs of the information society (Trinidade *et al.* 2000:7).

"Globally, education systems are currently challenged by an increasing demand for alternative delivery modes of teaching and learning. To meet these demands, higher education institutions are progressively incorporating ICT and ODL to increase access and to meet adult student learning needs within the framework of life-long learning" (Louw 2007:80). The impact of new telecommunications technologies on distance education is far-reaching. Real-time television systems, such as the Iowa Communications Network permit students and distance education practitioners to see and be seen, hear and be heard, in almost the same way as in the local classroom (Simonson *et al.* 1999:6).

According to the International Conference Workshops and Exhibition (ICWE) held in Lusaka, Zambia, ICT Conference Report (2010:4), ministers passed a directive on the use of ICTs for education. They expressed a desire to strengthen ICT competencies among teachers for which only ten percent of most countries' ICT budgets was intended. Intellectually challenging courses with high levels of interaction made possible by incorporating ICT in the teaching and learning process, can possibly address high rates of student failure.

Distance education continues to expand because of the growth of the internet, increased education technology competencies, and reduced barriers to accessing and using the internet (Dooley, Lindner & Dooley 2005:3-4). Traditional barriers to distance education still exist, such as a lack of professional student development and support, copyright and intellectual property issues, and too few financial models to create and sustain distance teacher education delivery, but these pose less of a barrier than attitudinal issues in promoting distance teacher education (Dooley *et al.* 2005:3-4). Rather than focusing on barriers, distance teacher education should focus on the competencies concerning communication to be successful in achieving quality distance teacher education.

Distance teacher education courses and programmes being delivered require a unique set of professional competencies for both lecturers and administrators. Whether using synchronous or asynchronous methods of instruction, systematic instructional design can help stimulate motivation, increase interaction and social presence, and authenticate learning outcomes (Dooley *et al.* 2005:3-4). Principles of distance teacher education, including self-directed and student-centered learning approaches should be emphasized.

According to Dooley *et al.* (2005:80), the lecturer's role in maximizing student interactions and engagement are necessary for distance teacher education to be successful. They say that student's length of engagement in an asynchronously delivered course is positively related to student's success in the course. In this regard, distance education practitioners can use strategies such as cohorts to stimulate interactions and engagement. Doing so, requires more planning than in face-to-face courses.

According to Chifwepa's recent study (2006:32) concerning the development of a model plan for the application of information communication technologies in distance education at UNZA, lecturers' perceptions were that ICT could improve learning and that it should therefore be employed in the delivery of distance education. However, inadequate computers, and computer skills were a major hindering constraints towards the application of the model (Chifwepa 2006:iv-v). This was supported by the remarks concerning computer skills made by a graduating student during the vote of thanks to UNZA Vice Chancellor's speech that was given at 2009 graduation ceremony of NCE. He wondered how the graduating students would use the donated computers in the schools where they were going to teach since they did not acquire such skills during their training (Graduating student 2009:4-5).

There is a need therefore, for ICT to be integrated in the distance education curriculum for teachers. According to Davis (1996:29), "[t]he advent of new technologies has made open learning more transferable, not just within its educational origins, but also to the larger area of vocational training and development and, in particular, the management development field". This means that if ICT is integrated in the provision of education through open and distance learning, many Zambians will access education and consequently contribute to the development of the country. Howard, Boettcher, Justice, Schenk, Rogers and Berg (2005:1) observe that "... the wide spread use of computer-mediated communications is one of the key forces for the explosion interest for distance education. Computer-mediated communication has provided tools for one of the idealist educator's dreams, extending the walls beyond classroom, come true. Distance education now dominates the discussion agendas for policy makers, administrators, researchers, faculty and students".

Effective communication in distance education is vital. In fact the contemporary interpretations and approaches of recent years define distance education in a social context. More specifically, the relationships that develop in an educational environment between those teaching, those being taught and the educational material comprise an exchange which functions in social terms (Lionarakis 2008:12). According to Bagwandeen (1999:129), distance education must involve two-way communication between lecturer and students for the purpose of facilitating and supporting the educational process.

3.9 Challenges associated with distance teacher education

Provision of distance teacher education has hitches and setbacks. Even at this early stage of this study it is important to point out these challenges that have already been pointed out.

3.9.1 Negative perception of distance education as revealed by the literature study

Distance education in general was previously considered an unsatisfactory method of education delivery and was relegated to catering for those individuals who had failed to learn through traditional means. Chikuya (2007:83) gives examples of girls who leave school because of pregnancy as the commonest group of people who were deemed suitable for distance learning. This gives distance education a negative image and portrays it as a method of education delivery that is not equal to conventional mode.

According to Hobbs (1997:107-108), there are still people who think that teachers cannot be trained through distance education programmes. They continue to question the effectiveness of education that teachers obtain through distance education despite its success in providing various postgraduate and teacher education qualifications. Their argument is that teaching itself is done through conventional process. Teaching is seen as a person to person activity.

The *University of South Africa* was at one time looked down upon for offering distance education programmes. It was called names for its departure from the traditional ways of imparting education (Chikuya 2007:83). Peters (1988:31) points out that there appears to be no coherent fusion between in-service training and initial training, which most distance education institutions provide. Related to this problem is the failure for distance education programmes to recognise the experiences of their students. They should acknowledge the fact that their students are people who have varying educational experiences.

3.9.2 Financial constraints

According to Chiyongo (2006:11), management is the science and art of mobilizing and organising human, financial and material resources in order to achieve organisational goals and objectives in terms of goods and services (see section 3.2). However, the budgetary restrictions which confront all developing countries make it difficult for distance education practitioners to have good staff development programmes. Siaciwena (2007:32) notes that UNZA had a staff development programme from which many university staff benefited. However, since the late 1980s the university has had no money to support the programme and therefore most of the lecturers and non-academic staff have had no chance to go for further training. Most of the staff have had no formal training since they joined the *Directorate of Distance Education*.

The problem of lack of resources has greatly contributed to some of the distance education programmes not to be successful. Despite this challenge, some developing countries have managed to have successful distance teacher education programmes. Usun (2003:15) explains that although Turkey had problems, such as lack of resources, budgetary restrictions, and a lack of in-service training on recent uses of current technology similar in scale to other developing countries, it has had large scale and successful experience with distance education in educating its citizens. Berge (2007:1) has advised political leadership in Africa, especially Ministries of Education, to put in place policies that encourage distance education, and provide funds to make distance teacher education programmes successful.

3.9.3 Technologically related issues

The challenge of information technology has been echoed by many authors of distance education. Ding (1994:334), for example, appeals for caution when employing technology as he argues that lecturers could lose control of activities in their lesson by focusing on technology. He also raises the fact that where technology is employed, the lecturer has far limited control over the events in lesson and he or she risks losing even that limited control that he or she might have. Another worry that he raises is that long time could be spent unreasonably on the process of learning how to use soft ware at the expense of the process of learning the course content of a

given subject. Chikuya (2007:84) says that "[w]hile technology does promise greater effectiveness, it is important that distance education practitioners are not carried away by the hype".

These challenges, it seems, require that technology be used cautiously so that users retain control over its use. These challenges also call for use of technology appropriately to avoid overusing it and denying users the opportunity to concentrate on the business of learning.

3.9.4 Diverse student related problems

While distance teacher education has been successful in addressing certain limitations of face-to-face learning in many countries, students at a distance also face other inhibiting factors. In addition to feeling isolated and lonely, Dooley *et al.* (2005:83) identify five limitations to learning asynchronously at a distance: (1) lack of match between course material and its explanation; (2) lack of contextual discussion; (3) lack of human teacher expression and explanation; (4) lack of human interaction; and (5) lack of contextual understandings.

Although the literature is replete about that which is the same between traditional students and distance students, there are, in fact, no consensuses on the differences in how these groups engage in the learning process (Dooley *et al.* 2005:84).

3.10 Preliminary suggestions in literature to improve distance teacher education

According to Chiyongo (2006:59), the study about management of the PTDDL in Chongwe district of Zambia revealed that effective management was central to all good distance education practice, principally because the activities involved in developing and teaching distance education programmes differed in key respects from conventional education. The management structure within which the PTDDL operated had a significant influence on the programme effectiveness. The study also revealed that the PTDDL could be improved by:

(a) improving communication links between students and those managing the programme;

- (b) ensuring that the *Ministry of Education* procured suitable vehicles for NISTCOL and District Management Team that could be used in carrying out the PTDDL activities;
- (c) ensuring that NISTCOL had a formally defined strategy for staff development in distance education. All the officers involved in the PTDDL should be trained in distance education methodology;
- (d) ensuring that distance education department at NISTCOL maintained good student records; and
- (e) making sure that the government funded NISTCOL and District Education Boards adequately.

The highest quality teaching material cannot be fully effective unless the distance education management organises a student service which adequately meets the needs of the student body (UNISA 1997:67). According to Paul (1990:188), the institutions which offer distance teacher education programmes will not be looked down upon if every distance education leader strives for good management practices, and leadership which encompasses the values of open and distance education.

3.11 Summary

This chapter focused on the literature related to the management of distance teacher education. Among the issues discussed are the definitions of distance education, effective management and administration of distance education, related studies, challenges encountered in managing distance teacher education, and a description of distance education in selected countries including Zambia.

The literature review has highlighted salient criteria for effective management at distance teacher education institutions which included capacity building in distance teacher education, student support services, and acceptable quality of distance teacher education modules and other printed

materials. The challenges associated with distance teacher education which included negative perception of distance teacher education, financial constraints, and technologically related issues have also been discussed.

From the literature review it is clear that distance education requires members of staff that are knowledgeable about their work. These people are supposed to provide support for their clientele. Communication has been revealed as a very important tool in the management of distance teacher education. Communication channels such as postal services, telephone, and internet have been mentioned by many researchers as being a bridge between the lecturers and the students. Information communication technologies are considered to have greatly influenced the growth of distance teacher education.

Preliminary suggestions to improve distance teacher education have also been identified. In this regard, the literature study has revealed that good management practices have direct impact on the quality of education provided through distance education.

Before conducting the study on the management of distance teacher education in the selected institutions in Zambia (see sections 3.7.1, 3.7.2, 3.7.3, 3.7.4 & 3.7.5) the researcher informed the reader on the functions of these institutions. The literature study has revealed that most of the institutions, in addition to full-time courses offer distance teacher education programmes. They have also been involved in distance education for not less than five years now.

In chapter four, the researcher describes the research design and methods of data collection.

CHAPTER 4

RESEARCH DESIGN

4.1 Introduction

The aim of this chapter is to describe the research design and methods that were selected to be used in the study and provide reasons why the chosen methods were appropriate to gather the information needed to answer the questions posed by the research problem. The chapter also pays particular attention to the qualitative research approach, the population, the sample size, the sampling procedure, the instruments for data collection, data collection techniques, data analysis and interpretation as well as the aspects validity, reliability and trustworthiness of research.

4.2 Research design

The research design involves deciding on what the research purpose and questions will be; what information most appropriately will answer specific research questions, and which strategies are most effective for obtaining it (LeCompte & Preissle 1993:30). According to Gay (1996:218), the design of a study "is basically the overall approach used to investigate the problem of interest, i.e., to shed light on, or answer, the question of interest. It includes the method of data collection and related specific strategies". This has also been echoed by Bless and Achola (1988:50) who state that a research design is a plan of any scientific research from the first to the last step. In this wide sense it is a programme to guide the researcher in collecting, analyzing and interpreting the participants' views about the topic under investigation. According to Babbie and Mouton (2004:74), a research design is "a plan or blueprint of how the researcher intends conducting the study". Muzumara (1998:46), defines research design as

...the organisation, plan, or procedure by which an investigator intends to answer research questions. The design is also intended to control errors of procedures and interpretation: the structure of the design specifically delimits the kind of observations which can be made, the persons from whom data can be collected, and the kind of analysis it is possible to make within the framework and the form of the data.

There are a number of qualitative research designs and methodologies such as the case study, ethnography, phenomenological study and grounded theory study. In order to collect data that were suitable for this study, the researcher decided to employ a qualitative research design in which five cases (educational institutions) namely: UNZA, ZAOU, NISTCOL, NCE and COSETCO, which constitute a collective case study, were studied in detail in relation to how they managed distance teacher education programmes.

The researcher was, however, aware that qualitative research designs differed from quantitative research designs in that they usually do not provide the researcher with a step-by-step plan or fixed recipe to follow. In this regard, Borg and Gall (1989:386) argue that

in a qualitative inquiry, the investigator starts with a very tentative design (or in some cases none at all) and develops the design as the inquiry progresses. This permits adapting the design to include variables that were not anticipated prior to the start of the empirical research. The rationale for an emergent design was that it was impossible for enough to be known ahead of time to develop an adequate research design.

The research design did not provide the researcher with a very rigid step-by-step plan; instead the researcher's choices and actions during research refined the design. An initial pliability of the research design is also confirmed by Leedy (2005:134), who says that initially a qualitative researcher may select only a general approach suitable for the study, perhaps selecting a case study or ethnography. As a researcher learns more about what is being studied, he or she specifies the methods to be used.

A qualitative design is "directed towards discovering or uncovering new insights, meanings and understandings. It is an in-depth analysis of the problem in order to understand the 'what' and 'why' of human behaviour" (Brink & Wood 1998:337). In this research, the researcher's interest was in the explanations that the participants gave concerning the management of distance teacher education. He wanted to discover new insights, meanings and understandings of the topic under investigation. Creswell (1994:145) regards a qualitative researcher as

someone who is interested in means that explain how people attribute meaning to their experiences. To achieve this, the researcher collected extensive data on the management of distance teacher education in Zambia. The data gathering techniques that were used in this qualitative study were interviews, observations, and document and content analysis (for example, analysis of modules, newspaper articles and seculars), analysis of past records (for instance, previous examination results), and the interpretation of audiovisual materials such as photographs, videotapes and audiotapes. According to Koshy (2008:86), qualitative data can illuminate human feelings and provide rich insights into the phenomenon being investigated. It must therefore be stressed that qualitative data are not inferior in status. What is important, however, is to carefully select data that serves the purpose of the study.

In this study, a qualitative approach which focused on a collective case study was used.

4.2.1 Qualitative approach

A qualitative approach was employed in order to satisfactorily answer the research questions posed in this study (see section 1.7). According to Leedy and Ormrod (2005:133),

to answer research questions, we cannot skim across the surface. We must dig deep to get a complete understanding of the phenomenon we are studying. In qualitative research, we do indeed dig deep: we collect numerous forms of data and examine them from various angles to construct a rich and meaningful picture of a complex, multifaceted situation.

The qualitative approach was chosen because it would enable the researcher to recognize many aspects related to the management of distance teacher education programmes at UNZA, ZAOU, NISTCOL, NCE and COSETCO. The approach would enable participants to describe their experiences about the management of distance teacher education in Zambia. McMillan and Schumacher (2001:395) define qualitative research as an inquiry in which researchers collect data in face-to-face situations by interacting with selected persons in their settings. Smith (1987:175) also notes that qualitative research is based on the notion of context sensitivity. It is different from other forms of research because the social environment in which people find

themselves has a great bearing on what they think and how they act. Similarly, it was hoped that the participants in this study would share with the researcher their beliefs, feelings, and attitudes about how distance teacher education programmes were managed in the chosen educational institutions of Zambia.

In the field of empirical educational research, a researcher can employ either quantitative or qualitative methodologies. The research methodology to be followed would be dictated by the nature of the data and the research problem. Qualitative research methodologies are methodologies which deal with data that are principally verbal while quantitative research methodologies focus on data that are mainly numerical (White 2005:80). Sidhu (2003:246) also states that it is not suggested that numerical measures are never used in qualitative study, but that other means of description are emphasized. For instance, when a researcher gathers data by participant observation, interviews and the examination of documentary materials, little measurement may be involved.

Since this research was mainly concerned with the management of distance teacher education in Zambia, the researcher was interested in the various stakeholders' views about the management of distance teacher education in the selected educational institutions. For that reason qualitative research methodology was more appropriate for this study. According to Ibrahim (2006:64), qualitative approach is first used to explore, define and develop an approach to a problem. Second, it is used to develop a deeper understanding of the phenomenon being investigated, and to develop a detailed perspective of that phenomenon. The qualitative paradigm was also used to establish in detail the factors that might have led to the problem being investigated.

According to White (2005:81), qualitative research is more concerned with understanding social phenomena from the perspectives of the participants. This occurs through the researcher's participation of the daily life activities of those involved in the research. Indeed qualitative methods have a tendency to be linked to the subjective nature of social realism. According to Daymon and Holloway (2002) (in Ibrahim 2006:64), qualitative methods are used to give more detailed insights into interpreting the situation in order to allow the researcher to see things, as they really are.

At the time of this research there were claims in the institutions that offered distance teacher education programmes that they were managing distance teacher education programmes well. A qualitative approach that was used in this research could verify that claim. Qualitative research approach would enable the researcher to evaluate the management of distance education in those institutions. It provides a means through which a researcher can judge the effectiveness of particular policies, practices, or innovations (Leedy & Ormrod 2005:135). McMillan and Schumacher (2006:315) have also confirmed the importance of qualitative research when they stated that qualitative studies are used for theory generation, policy development, improvement of educational practice, explanation of social issues and action stimulus.

The management of distance teacher education in Zambia is a phenomenon that must be studied in all its complexity. Leedy and Ormrod (2005:133) state that qualitative researchers rarely simplify what they observe. Instead, they realize that the issue they are studying has many dimensions and layers; as a result they portray it in its multifaceted form. McMillan and Schumacher (2006:317) refer to qualitative researchers as researchers who investigate in-depth small, distinct groups, such as the entire faculty in an innovative school.

4.2.2 Case study

Case study research has many definitions (Feast & Andrew 2003:81). For example, Sturman (1997:61) defines a case study as a "generic term for the investigation of an individual, group or phenomena", while Sternhouse (1985:645) defines a case study method as involving "collection and recording of data about a case or cases and the preparation of a report or the presentation of the case". Smith *et al.* (1990:129) state that the case study method is "an approach to research which utilizes ethnographic research methods to obtain and portray a 'rich' descriptive account of meanings and experiences of people in an identified social setting".

In this study, the researcher chose multiple case studies which form one collective case study because he wanted to collect extensive data on the management of distance teacher education in Zambia. According to Leedy and Ormrod (2005:135), a case study may be especially suitable

for learning more about a little known or poorly understood situation. It is supported by Ary et al. (1990:452) who state that "case studies often provide an opportunity for an investigator to develop insights into basic aspects of human behaviour". The case study design was used to come up with recommendations regarding the management of distance teacher education in Zambia. McMillan and Schumacher (2006:316) say that a case study design focuses on one phenomenon, which the researcher chooses to understand in depth regardless of the number of sites or participants for the study.

4.3 Population and sampling

4.3.1 Population

A population is a group of elements or cases, whether individuals, objects or events, that conform to specific criteria and to which we intend to generalize the results of research (McMillan & Schumacher 2001:169). Bless and Achola (1988:59) also agree that a population is the entire set of objects and events or group of people which is the object of research and about which the researcher wants to determine some characteristics. According to Babbie and Mouton (2004:173), a population is defined as "the theoretically specified aggregation of study elements". Gay (1990: 102) says

regardless of the technique to be used in selecting a sample, the first step in sampling is the definition of the population. The population is the group of interest to the researcher, the group to which she or he would like the results of the study to be generalisable. The defined population has at least one characteristic that differentiates it from other groups.

Parahoo (1997:218) also describes a study population as the total number of units from which data can potentially be collected. The units may be individuals, organisations, events or artifacts. The nature of the problem concerning the management of distance teacher education in Zambia made it necessary to focus on the following units:

The principals of the colleges that offer distance teacher education programmes, the principals' deputies, the HODs, the Dean of School of Education at ZAOU, the Director and Chief Education Officer of the Directorate of DODE at MOE, the Head of the Advisory Unit for Colleges of Education (AUCE), the Director of the Directorate of Distance Education, the two coordinators in charge of research and evaluation, and materials production of the Directorate of Distance Education at UNZA as well as lecturers and the distance students.

The above were people considered to have had the experience of managing distance teacher education in Zambia. The opinions of the students who had the experience of learning at a distance were likely to reflect the reality of the situation at that time. Senior education managers at MOE were included in order to get their views on the management of distance teacher education in Zambia (see section 1.5.2.1).

4.3.2 Sample

White (2005:252) defines a sample as a group of subjects or situations selected from a larger population. Bless and Achola (1988:60) define a sample as the sub-set of the whole population which is actually investigated by a researcher and whose characteristics will be generalized to the entire population.

According to Leedy and Ormrod (2005:133), the particular entities which qualitative researchers select comprise their sample, and the process of choosing them is called sampling. The most important thing in sampling is to identify an appropriate sample from which to acquire data.

In this study, the researcher used purposive sampling strategies in order to fully understand the way distance teacher education was managed in the five institutions under investigation. The sampling strategies are supported by McMillan and Schumacher (2001:319) who say that "the power and logic of purposive sampling is that a few cases studied in depth yield many insights

about the topic, whereas the logic of probability sampling depends on selecting a random or statistically representative sample for generalisation to a larger population".

In this sample method, the researcher purposely targets a group of people believed to be reliable for the study. The power of purposive sampling lies in selecting information related to the central issues being studied (Kombo & Tromp 2006:82). Here the investigator selects the particular units from the population from which relevant samples are drawn. In this study, all the people in key managerial roles concerning distance teacher education training in the five distance teacher education institutions as well as the key representatives from MOE were chosen whilst a selection of lecturers as well as present and past students were made. For a clear depiction of the interviewees and their numbers the reader is referred to Table 4.1 in section 4.4.1.2.

The purposive sampling technique was appropriate for this study because the selected participants were in the position to discuss issues concerning the management of distance teacher education programmes in their institutions. Leedy and Ormrod (2005:133) argue that purposive sampling technique ensures that participants with needed information about the topic are selected.

The individuals or objects, which were likely to yield the most needed information about the topic under investigation, were chosen (see table 4.1). The researcher noted that in purposive sampling, rich information rather than the number of participants was important (Simuchimba & Luangala 2007:11). Therefore, the sample for this study was selected in such a way that the research questions which sought to establish the strong and weak aspects of the distance teacher education in Zambia (see section 1.7) could be properly answered. The interviewees had either managed distance teacher education for some time, or had studied through distance education.

4.4 Methods of data collection

According to Kombo and Tromp (2006:99), data collection refers to the gathering of information to serve or prove some facts. Data collection is vital in everyday living. For example, commercial organizations collect data to improve their economic prospects. By collecting the views of people's attitudes about products, they are able to offer goods or services that potential customers seem to want.

Merriam (1998) (in Chikuya 2007:93) argues that since case studies are normally of qualitative nature, it is logical that they utilize qualitative data collection methods. Therefore, the researcher, used interviews, observations and document reviews as data collection strategies. The researcher chose these three techniques of collecting data because they were likely to yield a great deal of information about the management of distance teacher education in Zambia.

According to Daymon and Holloway (2002) (in Ibrahim 2006:64), the combination of interviews, observations and content analysis as qualitative data collecting techniques are likely to yield the most needed information about the topic under investigation. Observations and interviews are the most common data collection methods in qualitative studies. They are mainly used to give more detailed insights into interpreting the situation so that the researcher sees things as they really are.

4.4.1 Interviews

McMillan and Schumacher (2006:350) explain that interviews are response questions to obtain data from participants about how they conceive and give meaning to their world and how they explain events in their lives. Qualitative interviews may take several forms: the informal conversational interview, the interview guide approach, and the standardized open-ended interview. These types of interviews vary in terms of structure and comparability of responses in data analysis. According to Leedy and Ormrod (2005:146),

interviews in a qualitative study are rarely as structured as the interviews conducted in a quantitative study. Instead, they are either open-ended or semi-structured, in the latter case revolving around a few central questions. Unstructured interviews are, of course, more flexible and more likely to yield information that the researcher hadn't planned to ask for; their primary disadvantage is that the researcher gets different information from different people and may not be able to make comparisons among the interviewees.

In this study, the interviews were semi-structured and the researcher had prepared a few guiding questions although they were not always asked in a very direct fashion. Borg and Gall (989:451) advise researchers, especially novice researchers, to develop a guide to be used during the interview: "This guide makes it possible to obtain the data required to meet the specific objectives of the study." According to White (2005:143), an interview instrument "provides access to what is inside a person's head, makes it possible to measure what a person knows (knowledge or information), what a person likes or dislikes (values and preferences) and what a person thinks (attitudes and beliefs)". In this qualitative study, the researcher and participants therefore can be considered to have been key instruments. The extent to which the needed information about the management of distance teacher education in Zambia was revealed, depended on the research skills of the researcher and the richness of interviewees' responses.

4.4.1.1 Semi-structured interviews

As mentioned, semi-structured interviews were employed as data collection technique. In this regard, the researcher was aware of key issues on which he wanted to gain information although the spontaneity of interviewees referring to other matters was not suppressed. It should be noted that in this semi-structured interview the general outline to be followed was indicated but within each section the questioning was free according to the choice of the interviewer (Sidhu 2003:149). White (2003:76) has identified the following advantages of semi-structured interviews:

- (a) The interviewer can probe for more specific answers and can repeat a question when the response indicates that the interviewer misunderstood the question.
- (b) People, who cannot read and write, can still answer questions in a semi-structured interview.
- (c) The interviewer is present to observe non-verbal behaviour and to assess the validity of the interviewee's answers.
- (d) The interviewer can make sure that the interview is conducted in privacy, that there is no noise.
- (e) The interviewer can ensure that the interviewee does not answer the question out of order.
- (f) Spontaneous answers may be more informative than answers about which the interviewee has had time to think.
- (g) The interviewee is unable to cheat by receiving prompting or answers from others.
- (h) The interviewer can make sure that all questions are answered.
- In-depth semi-structured individual interview

Cohen and Manion (1997) (in Muzumara 1998:51), define an in-depth semi-structured individual interview as "a two-person conversation initiated by the interviewer, for the specific purpose of obtaining research-relevant information as specified by research objectives of systematic description, or explanation".

In-depth individual interviews played a significant role. The researcher interviewed the Chief Education Officer and the Principal Education Officer of DODE at MOE (standing in for

Director and Chief Education Officer respectively) (see table 4.1 in section 4.4.1.2), the Head of the *Advisory Unit for Colleges of Education* (AUCE), the Director, the two coordinators of the research and evaluation, and materials production, the Dean and one Head of Department in the *School of Education* at ZAOU, the Principals, the Vice Principals of the Colleges of Education and students. The researcher conducted twenty-one in-depth individual interviews (20 for members of staff, including 2 senior education managers from MOE, and 1 student individual interview) (see table 4.1 in section 4.4.1.2). According to Kavulya (2007:59), in-depth individual interviews with administrators and professionals are necessary because they clarify issues concerning the management of distance teacher education in detail. By means of the use of the question and answer technique, participants disclosed sensitive issues such as institutional finances. Sidhu (2005:145) observes that

an interview is generally adopted as a method to offset the limitations of the questionnaire. Instead of writing the response, the subject or interviewee gives the needed information verbally in a face-to-face relationship. People are usually more willing to talk than to write. With a skilful interviewer, the interview is often superior to other data gathering devices. After the interviewer gains rapport, or establishes a friendly relationship with the subject, certain types of confidential information may be obtained that an individual might be reluctant to put in writing.

The views of the senior education officers, who had been managing distance teacher education for quite some time, or had studied through distance education, assisted the researcher to validate responses from lecturers and students.

The interviews were held in a private setting with one person at a time so that the subject was free to express himself or herself fully and truthfully.

• In-depth semi-structured focus group interview

In-depth semi-structured focus group interviews as a method of data collection in the field of education have been employed for many years (Feast & Anderson 2003:81). Morgan (1996:130)

says that semi-structured focus groups are defined as "a research technique that collects data through group interaction on a topic determined by the researcher". He identified three essential elements of focus groups: a research method devoted to data collection, interaction in group discussion as the data source, and the active participation by the researcher. The interaction in group discussion as data source was the characteristic of this study.

In-depth interviews are one of the most popular methods used to obtain underlying motivations, beliefs, attitudes, and feelings on distance education topics in a qualitative manner (Ibrahim 2006:65). According to Sidhu (2005:145), one of the advantages of in-depth focus group interviews is that an interviewer can probe into casual factors, determine attitudes, discover the origin of the problem, involve the interviewee in an analysis of his or her own problems and secure his/her cooperation in this analysis.

In order to cover in detail the factors that affect the management of distance teacher education, the researcher conducted in-depth focus group interviews with the Heads of Departments, lecturers and selected current and former students of UNZA, ZAOU and NISTCOL. There were three distance education practitioners and eight distance student focus group interviews. Each focus group interview had an average of six members. According to the researcher, both former and current students would possibly have various views on the management of distance teacher education in the mentioned educational institutions. The researcher therefore found it necessary to have in-depth interviews with them. As regards NCE and COSETCO, only lecturers were interviewed because these institutions had been directed by MOE to discontinue distance education programmes until they had put in place the required support services (see table 4.1; section 4.4.1.2).

The researcher visited UNZA and ZAOU to collect data twice, while NCE and COSETCO were visited only once. NCE and COSETCO were included in the research even though they were not offering distance teacher education at the time of this study. They were, however, considered important for the study since the management and lecturers had previously been involved with distance teacher education at NCE and COSETCO. As regards NISTCOL, it could be mentioned that it was the educational institution where the researcher was working as

the Vice Principal. It was therefore easy to arrange interviews with management, lecturers and students.

The in-depth focus group interviews were used to collect primary data from lecturers and students. In this regard, White (2005:146) points out: "Focus group interviews involve organised discussions with a selected group of individuals to gain information about their views and experiences of a topic". Participants being interviewed in this way allowed the researcher to obtain several perspectives of the management of distance teacher education in Zambia. However, during fieldwork, the researcher also interviewed individual lecturers that he or she thought had more information about the management of distance teacher education in Zambia. The researcher ensured that the interviews were conducted in a relaxed environment.

During the focus group interviews, the interviewer tried to avoid one interviewee dominating a discussion and endeavoured to involve all interviewees. This was achieved through moderating the discussion in such a way that all participants were accorded an opportunity to air their views regarding the management of distance teacher education at the educational institutions.

The researcher also considered the following suggestions for conducting productive interviews (Leedy & Ormrod 2005:147):

- a) identifying some questions in advance;
- b) making sure the interviewees were representative of the group involved in distance teacher education;
- c) locating a quiet place for the interview;
- d) obtaining a written permission to conduct the interview;
- e) establishing and maintaining rapport with the interviewees;
- f) focusing on the actual situations rather than on the abstract;

- g) avoiding putting words in people's mouths;
- h) recording responses verbatim;
- i) avoiding reacting to interviewees' responses;
- j) remembering that the aim was not to get facts but information;
- k) taking into account group dynamics.

It was hoped that by following the above guidelines the researcher would gather the required information regarding the management of distance teacher education in Zambia.

Leedy and Ormrod (2005:146) advises that to conduct an in-depth focus group interview, the researcher should gather several people, about 12, to discuss a particular issue for 1 to 2 hours. However, since the focus groups were small, ranging in numbers from two to eight interviewees, the duration of the focus group interviews averaged approximately forty to forty-five minutes. Obviously, a free unthreatened environment in which people could feel free to share their opinions was created (White 2005:147).

The reason for including in-depth focus group discussions was that, participants would be more comfortable to talk about management of distance teacher education in Zambia in a group than alone. Interaction among participants would also be more informative than individually conducted interviews. Before the interviews the researcher identified salient aspects of distance teacher education, obtained from the literature study, which were to serve as guiding points for discussion during the interviews.

White (2005:146-147) notes that interviewing more than one person at a time sometimes proves very useful. Some interviewees need to be motivated by their peers in order to reveal their feelings. The interviewer created a relaxed environment in which he interacted with the interviewees freely.

Before the focus group interviews, the researcher obtained permission from the college management to take photos of some of the participants. At the beginning of the focus group interview the researcher also obtained permission from participants to record the discussions and take photos. According to Muzumara (1998:54), the interview data can be recorded by means of the taking of notes and writing down the main features of the interview after the interview has been completed, as well as tape recording and transcribing the interviews. The field notes took away the burden of remembering all the events that occurred during the interview. Borg and Gall (1989:454) note that "note taking or tape recordings are the usual methods for preserving the information collected in the interview".

4.4.1.2 Details concerning the interviews conducted

The following table provides essential data pertaining to each of the 32 interviews conducted.

Table 4.1: Essentials of the interviews

No.	Date of	Type of interview	Interviewee/s	No. of	Duration of the
of	interview			interviewee/s	interview/minutes
interview					
1	13.03.2009	Semi-structured focus group	Lecturers from NISTCOL	4	40
2	12.05.2009	Semi-structured focus group	HODs from NISTCOL	5	40
3	25.06.2009	Semi-structured individual	Principal from NISTCOL	1	30
4	26.12.2008	Semi-structured focus group	Distance students from NISTCOL	8	45
5	26.12.2008	Semi-structured focus group	Distance students from NISTCOL	2	35
6	22.04.2009	Semi-structured focus group	Distance students from NISTCOL	6	45
7	30.04.2009	Semi-structured focus	Distance	4	40

		group	students from		
			NISTCOL		
8	11.03.2009	Semi-structured	Coordinator for	1	35
		individual	student support		
			services also		
			acting as		
			coordinator for		
			course material		
			from UNZA		
9	11.03.2009	Semi-structured	Acting assistant	1	30
		individual	registrar from		
			UNZA		
10	16.03.2009	Semi-structured	Head AUCE	1	30
		individual	from UNZA		
11	16.03.2009	Semi-structured	Lecturer from	1	30
		individual	UNZA		
12	09.04.2009	Semi-structured focus	Coordinator for	2	35
		group	research and		
			evaluation, and		
			an officer in the		
			DDE registry		
			from UNZA		
13	18.05.2009	Semi-structured	Director – DDE	1	35
		individual	from UNZA		
14	19.05.2009	Semi-structured	Librarian also	1	30
		individual	served as		
			Director-DDE		
			from UNZA		
15	19.05.2009	Semi-structured	Assistant Dean	1	30
		individual	1 School of		
			Education from		
			UNZA		
16	19.05.2009	Semi-structured	Lecturer from	1	30
		individual	UNZA		
17	05.06.2009	Semi-structured	HOD from	1	35
		individual	UNZA		
18	16.03.2009	Semi-structured focus	Distance	4	45

		group	students from		
			UNZA		
19 1	7.03.2009	Semi-structured focus	Distance	3	40
		group	students from		
			UNZA		
20 2	7.04.2009	Semi-structured	Distance student	1	35
		individual	from ZAOU		
21 0	7.05.2009	Semi-structured focus	Distance	4	40
		group	students from		
			ZAOU		
22 1	1.05.2009	Semi-structured focus	Distance	3	40
		group	students from		
			ZAOU		
23 2	3.03.2009	Semi-structured	Part-time	1	30
		individual	lecturer from		
			ZAOU		
24 1	2.05.2009	Semi-structured	HOD from	1	30
		individual	ZAOU		
25 0	2.07.2009	Semi-structured	Dean-School of	1	35
		individual	Education from		
			ZAOU		
26 2	6.03.2009	Semi-structured	Principal	1	30
		individual from			
		COSETCO			
27 2	5.03.2009	Semi-structured	HOD from	1	30
		individual	COSETCO		
28 2	5.03.2009	Semi-structured	HOD from	1	30
		individual	COSETCO		
29 2	6.03.2009	Semi-structured	Principal from	1	35
		individual	NCE		
30 2	6.03.2009	Semi-structured focus	Lecturers from	2	40
		group	NCE		
31 1	8.12.2009	Semi-structured	Principal	1	35
		individual	Education		
			Officer-ODL		
			(Standing in for		
			Chief Education		

			Officer) from		
			MOE		
32	19.12.2009	Semi-structured	Chief Education	1	35
		individual	Officer-DODE		
			(Standing in for		
			Director) from		
			MOE		

Source: Unpublished transcriptions of interviews (2009) in possession of this researcher

4.4.2 Observations

The researcher went to the institutions being investigated to observe distance teacher education activities. The observation method was chosen in order to verify the information that participants gave during the interviews.

Leedy and Ormrod (2005:145) argue that observations in a qualitative study are intentionally unstructured and free-flowing. This means that the researcher is free to shift focus from one thing to another as new and potentially significant objects and events present themselves. The advantage of collecting data through observation is that the researcher gathers data from various sources. However, inexperienced researcher may waste time observing things that are not important, overlooking those that are central to the question. The researcher was aware of this disadvantage, and therefore concentrated on observing things that were directly related to the management of distance teacher education.

Whilst gathering data using the observation technique, the researcher adhered to the following suggestions made by Leedy and Ormrod (2005:145-146):

a) The researcher used various data recording strategies, for instance, field notes and audiotapes.

- b) When beginning the observations, the researcher was introduced to the people whose activities were to be observed, and also briefly described the study and got participants consent.
- c) During the observation the researcher remained relatively quiet and friendly to anyone who approached him.
- d) Whilst taking field notes, the researcher divided the page of his notebook into two columns. The left column was for the observations while the right column contained preliminary interpretations. It was done to avoid confusing the actual observations with the interpretations of them. It also enhanced the validity and reliability of this particular data collecting method.

Observation can be either participant or non-participant. In participant observation, the observer works his or her way into the group he or she is to observe so that, as a regular member, he or she is no longer regarded as an outsider against whom the group needs to guard itself (Sidhu 2003:163). In this study, the researcher was a participant and a non-participant observer. The researcher was a participant observer at NISTCOL where he was the Vice Principal, and a non-participant observer at UNZA, ZAOU, NCE, and COSETCO where he merely went to observe the activities of the distance teacher education.

Observation is a technique for gathering data that are almost impossible to obtain with other methods. Researchers observe and record information relevant to the research questions (McMillan & Schumacher 2006:348). White (2005:161) identifies six characteristics that should be followed by a participant observer:

- a) Observe yourself as well as observing others.
- b) Try to become explicitly aware of what others take for granted.
- c) Look beyond the immediate focus of your activity use a wide-angle lens.

- d) Try to experience the situation simultaneously both as insider and as an outsider.
- e) Be introspective as you observe.
- f) Keep a record not only of what you see, but also of how you experience the situation, and mark the latter in such a way that you can separate what you see occurring from how you experience it.

4.4.2.1 Participant Observations

Gay (1996:242-243) say that most qualitative studies, at least in education, are characterized by some type of overt participant observation and the taking of extensive notes. According to LeCompte and Preissle (1993:195), "participant observers live as much as possible with the individuals they are investigating, trying to blend in and taking part in their daily activities. Participant observers watch what people do, listen to what people say, and interact with participants." According to White (2005:158), the purpose of observational data is to describe

- a) the setting that was observed;
- b) the activities of the participants that took place in that setting; and
- c) the people who participated in those activities and their contributions.

In this study, the researcher applied participant observation as a data gathering-instrument because he was interested in the ways in which distance education practitioners and other stakeholders thought about the management of distance teacher education in Zambia. It was generally assumed that the subjects could only be appreciated if their words and expressions about the management of distance teacher education in Zambia were revealed while they were performing their tasks.

Unlike observations conducted in quantitative studies, observations in a qualitative study are intentionally unstructured and free-flowing. That means that the researcher shifts focus from one thing to another as new and potentially significant objects and events present themselves. The main advantage of carrying out an observation in this way is flexibility: the researcher can take advantage of unforeseen data sources as they surface (Leedy & Ormrod 2005:145).

However, according to Leedy and Ormrod (2005:145), unstructured observations have two major disadvantages. These are:

- a) The researcher (especially a novice researcher) will not always know what things are most important to look for. He or she may record trivial things overlooking issues central to the research questions.
- b) The researcher may alter what he or she observes.

In order to ensure that the information the researcher collected presented what people said and did, and how significant events unfolded, the researcher tried not to divorce the interpretation of events from the actual observation thereof. In this study, the focus of the observations was on the specific issues of distance teacher education in the educational institutions that were under investigation. For instance, the researcher attended a meeting where lecturers discussed the support services for their distance students, and the meeting where lecturers discussed the face-to-face session prior to the arrival of the distance students. The researcher paid attention to specific issues like how the students were supported during the face-to-face session.

The researcher tried to describe all relevant aspects of the situation observed as accurately as possible immediately after leaving the setting. In other words, he made sure that the descriptions were factual, accurate and thorough without being cluttered by irrelevant issues. On the other hand, he made sure that the information was not vague and too general. According to White (2005:159), the basic criterion that the researcher should apply to a recorded observation is the extent to which the observation permits any reader to fully understand the observed situation. In addition to the literal descriptions, the observer also recorded personal reactions to

the observed situations. This was done to minimize the effects of the researcher's biases concerning the findings, especially since the researcher was one of the members of staff of an institution that offers distance teacher education programmes (see section 4.4.2).

A very important reason for combining interviewing and observation techniques was for them to complement each other. During the face-to-face interview the researcher also involved observation skills. The researcher was aware that a skilled interviewer is a skilled observer who is able to read nonverbal messages, sensitive to how the interview setting can affect what is said, and carefully attuned to the nuances of the interviewee interactions and relationships. Likewise, interviewing skills were essential for the observer because during fieldwork the observer needed and wanted to talk with people, whether formally or informally. In this regard, the participant observer gathered a great deal of information through informal, naturally occurring conversations. Therefore, the researcher understood that interviewing and observation were mutually reinforcing qualitative techniques. The observer also realized the fundamentally people oriented nature of qualitative inquiry.

4.4.3 Document reviews

Document reviews were used to support the interview method, which was the main data collection strategy, and observation. Among the documents that were analysed were circulars and modules. It was important to analyse the contents of these documents so as to verify the information obtained using other methods of data collection. Chiyongo (2007:iv) explains that triangulation is used in order to verify the responses given during the study. According to Gay (1996:244), the use of other data collection strategies (triangulation) acts as a safeguard to detect serious observer effects too.

4.5 Validity, reliability and trustworthiness of the study

This section of the study deals with validity, reliability and trustworthiness of the study. The researcher has decided to discuss them in order to determine whether the study adhered to these three criteria of scientific study.

4.5.1 Validity

According to Schumacher and McMillan (2006:324), validity refers to the degree of congruence between the explanations of the phenomena and the realities of the world. Validity of qualitative design, therefore, refers to the degree to which the interpretations have mutual meanings for the participant and the researcher. These people should agree on the description and interpretation of the events being discussed. According to Field (2002) (in Ibrahim 2006:68), validity refers to the accuracy of the definitions given to the concepts under investigation by the measures utilized whereas reliability is related to stability of those measures. In more a technical sense, validity is the precise point at which a given group of measures are found to be characteristic and typical in terms of the cores of interest they are to reveal. In practice any methodical error must be eliminated from the process. White (2005:193) supported the above sentiment when he said that validity is the researcher's conclusion which corresponds to the actual state in reality. Cohen and Manion (1994) (in Banda 2002:36) said that the most important quality of any research instrument is the validity or extent to which an instrument measures what it supposed to measure. In a qualitative study a researcher is also an instrument. Therefore the definition of validity cited above is applicable to this study.

According to Charles (1995:102), validity of qualitative research data is more difficult to establish than validity of quantitative data. However, this does not mean that validity in qualitative data is less important. In this study the researcher used three appropriate methods to ensure triangulation which adds to the validity of scientific research (White 2003:17)). Since the study was mainly descriptive, the researcher employed semi-structured interviews, observations and document analysis. The methods of collecting data were determined by the following factors: the nature of the data that were collected, the research questions that were asked, scope of the type of the study and the ways of maximizing the validity, and the reliability of the data (for reliability, see section 4.5.2).

To ensure validity in this qualitative research, the researcher identified techniques that would check the credibility of the data and minimize personal bias. Internal validity was ensured by

establishing member checks, guarding against bias and observing changes in the responses of interviewees so that interviewees' perceptions could be clarified by follow-up questions (White 2005:201-202). Prolonged and persistent field work, tape recording and transcription of interviews as well as using verbatim accounts in the analysis also contributed towards ensuring validity. As regards validity of observation, Sidhu (2003:165) advises that the observer must be qualified to make judgments regarding the activity observed and emphasizes that actual observation should be made of on-the-job- activity as well as the product of such activity. In terms of this study, the researcher went to the educational institutions to gather data during observation.

4.5.1.1 Content validity

According to Bless and Achola (1988:107), content validity is concerned with whether or not a measuring instrument is representative of the full content of the thing being measured. The content validity of this study heavily relied on the techniques that were used, the research skills displayed, and the suitability of the objects that were examined and their conformity to the framework of the study. According to Ibrahim (2006:68), these validity standards can be implemented by reviewing all relevant literature for any precedent use of analogous technique, by seeking the assistance of specialist definitions by expert figures in the field and by conducting sufficient number of semi-structured in-depth interviews.

4.5.1.2 Face validity

Face validity is considered to be a complementary technique which ensures that a research measures what it supposed to measure. Prior to collection of data, a list of questions relating to the study, which were meant to guide the researcher during the interviews, were submitted to the supervisor and peers in order to assess the validity of the questions.

The concept of face validity is described by a wide range of terms in qualitative studies. This concept is not a single, fixed or universal concept, but "rather a contingent construct, inescapably grounded in the processes and intentions of particular research methodologies and projects"

(Winter 2000:1). Although some qualitative researchers have argued that the term face validity is not applicable to qualitative research, they have at the same time realized the need for some kind of qualifying check or measure for their research. Golafshani (2003:602) suggests that face validity is affected by the researcher's perception of validity. As a result many researchers have developed their own concepts of face validity and have often generated or adopted what they consider to be more appropriate terms, such as, quality, rigor and trustworthiness.

4.5.2 Reliability

Qualitative researchers regard reliability as the elimination of casual errors that can influence results. Reliability can be divided into internal reliability and external reliability. Internal reliability is achieved during the study through triangulation, cross examination, member checks, careful selection and training of assistant researchers, careful auditing of the data, by reaching consensus regarding the findings with the participants, and using audiotapes and video recordings to store information and computers for the processing of data, while external reliability refers to the verification of the findings of the research, when the same research is conducted by an independent researcher under the same circumstances and using the same participants (White 2005:201). According to Muzumara (1998:49), reliability refers to the consistency between independent measurements of the same phenomenon. The same methods used by different researchers at different times under similar conditions should yield same results.

To increase external reliability, the researcher accurately described the various aspects of the subjects such as status and their roles, the concepts and the methods used. In addition, the researcher asked questions about the management of distance teacher education, based on the participants' experience and practices in their jobs.

Although reliability and validity of the study are treated separately in quantitative studies, these terms are not viewed separately in qualitative research (Golafshani 2003:600). Instead, a terminology which encompasses both, such as credibility, transferability, and trustworthiness are often used (White 2005:203) and was the focus of the researcher.

From the definitions above, reliability and validity in quantitative research reveal two strands: Firstly, with regards to reliability, whether the result of the research can be replicable or not. Secondly, with regards to validity, whether the means of measurement are accurate and whether they are actually measuring what they are intended to measure.

Although this researcher holds the view that replicability is difficult to ensure in qualitative studies, he nevertheless strived for replicability by ensuring that the methods of gathering data were accurate and efficient. The researcher also made sure that the research design was appropriate to the problem that was investigated. In this way, other researchers who would like to replicate this study would be likely to obtain similar results.

4.5.3 Trustworthiness of study

According to White (2005:203), trustworthiness refers to the quality of the research. This study is considered trustworthy because the findings were based on a well-founded research design as well as relevant informants and context. In this regard, the researcher tape recorded the interviews and regular field notes and photographs, which were available for scrutiny, were taken.

To ensure trustworthiness, the researcher considered Lincoln and Guba's method (1985:329), which consists of the following criteria for establishing trustworthiness: truth-value, applicability, consistency and neutrality.

4.5.3.1 Truth-value

Truth-value helps the researcher to establish confidence in the subject and the context in which the research is undertaken. In this study, the researcher established confidence through the strategy of credibility. Credibility was achieved through prolonged fieldwork, triangulation, persistent observation, taking notes during the interviews and tape-recording the interviews, peer debriefing, focusing on the topic under study (*Management of distance teacher education*

in Zambia), and member checks. In addition, the researcher had adequate knowledge in qualitative research methodology and was being supervised by a competent and experienced professor in qualitative research.

4.5.3.2 Applicability

According to White (2005:204), applicability refers to the degree to which the findings can be applied to other contexts and settings or with other groups. It is the ability to generalize the findings to larger populations.

In qualitative research however, generalisation is not important because data will not always be the same in similar settings and even if the study could be repeated using the same participants, the findings might not be exactly the same as in the previous one (Babbie & Mouton 2004:277). Therefore, the goal of the researcher in this study was simply to identify participants' beliefs, thoughts and perceptions of managing distance teacher education in their educational institutions. According to Babbie and Mouton (2004:277), these beliefs, thoughts and perceptions might not be the same in another situation.

Applicability then was not seen as relevant to this qualitative study, because the purpose of the study was to describe a particular phenomenon or experience, and not to extend or apply results to other situations (White 2005:204). However, according to White (2005:4), transferability is a criterion against which applicability of qualitative data is assessed. This study would meet this criterion when the results fit into contexts outside the study situation that are determined by the degree of similarity or suitability.

4.5.3.3 Consistency

Consistency means that the findings of the research would be consistent if the inquiry were replicated with the same participants or in a similar context (White 2005:204). According to Field and Morse (1985) (in White 2005:205), the key to qualitative research is to learn from the participants rather than control them. Moreover, instruments that are assessed for consistency

in a qualitative study are the researcher and the participants. Therefore, a qualitative study emphasizes the uniqueness of the human situation, so that variation in experience rather than identical repetition is sought. In this study, it did not matter whether the results would be identical when future researchers using the same research participants who have extended their experience and same methods in the same context would yield exactly the same results or not because the aim of the study was to assess the present effectiveness of the management of distance teacher education in Zambia.

Dependability is used to ensure consistency (Marshall & Rossman 1995:145). According to Babbie and Mouton (2004:278), dependability indicates that if research were to be repeated with the same participants in the same context, the findings would be similar, not necessarily identical. There is no credibility without dependability (Lincoln & Guba 1985:290, Babbie & Mouton 2004:278). In order to attempt to ensure dependability, the researcher permitted independent experts who were experienced in qualitative research methodology and peers to scrutinize the data and the techniques of obtaining them. The supporting documents were also availed to them for further scrutiny.

4.5.3.4 Neutrality

Neutrality refers to the extent to which the findings of an inquiry are determined by the participants and the conditions of the inquiry and not by biases, motivations, interests or perspectives of the inquiry (Lincoln & Guba 1985:290). In this study, the researcher avoided bias to ensure the objectivity or neutrality of the data by entering the field without preconceived ideas or subjectivity. Instead he followed the described data collection methods, and discussed and reached consensus on the findings with the research assistant.

4.6 Data analysis

According to Gay (1996:245), the raw data for quantitative study are numbers, for example, test scores. In a qualitative study the raw data consists of words and possibly visual material such as photos. These data include primarily field notes, often supplemented by documents and

interview transcripts. Rudestam and Newton (1992:31) also point out that "qualitative research implies that the data are in the form of words as opposed to numbers". In this qualitative study, the data was reduced to themes or categories.

The focus group interviews were first transcribed to provide a complete record of the discussion. The researcher then analysed the content of the discussion by looking for trends and patterns that reappeared within a single focus group or among various focus groups. Lungwangwa *et al.* (1995:153) confirm that the qualitative raw data from interviews, field notes on focused discussions and content analysis should be subjected to the constant comparative analysis technique in order to reach the most significant themes of the topic under study. White (2005:148) also observes that other considerations would be that which relate to consistency of comments and specificity of responses in follow up probes.

In this study, the researcher collected documents related to the management of distance teacher education in Zambia. According to Gay (1996:243), "[o]bservation is often supplemented by the collection of relevant documents (such as minutes of meetings and memoranda) and in-depth, semi-structured interviews". Furthermore, LeCompte and Preissle (1993:196) point out that "participant observation is usually combined with other means of gathering data-surveys, [namely] interviews in their various forms, artifacts, and document collection". Therefore, as a way of collecting more facts on the management of distance teacher education in Zambia and also to verify data from interviews, the researcher collected and reviewed documents such as the MOE policy on the provision of distance education, minutes of meetings and memoranda on distance teacher education.

According to Leedy and Ormrod (2005:145-143), content analysis is a detailed and systematic examination of the contents of a particular body of material for the purpose of identifying patterns, themes, or biases. These materials include books and modules for distance students. Content analysis was used, for instance to establish its quality. In analysing the content of the documents, the researcher made the following steps:

a) Identified the specific body of material to be studied.

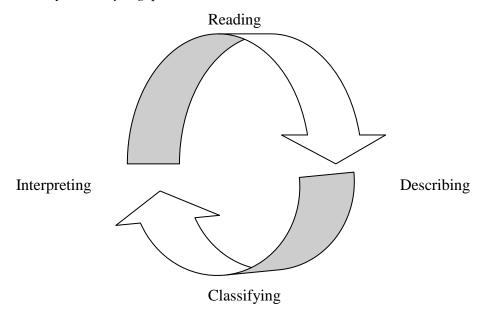
- b) Defined the qualities or characteristics to be examined.
- c) For a long document, the researcher broke it down into manageable parts.
- d) Eventually, the researcher scrutinized the material according to its characteristics or qualities.

The researcher examined the printed materials for distance students in the educational institutions that the researcher had purposively selected. In analyzing these study materials, he focused on the characteristics of good distance teacher education materials. UNISA (1997:18-31) highlights the following characteristics of good distance teacher education materials: organisation of content, presentation and layout, stimulating activity learning and teaching the ability to learn independently.

In this study, like in other qualitative studies, the researcher started analyzing data during the time data were being collected. This is in agreement with White (2005:186), who says that analysis of qualitative data takes place simultaneously with data collection, the first step being that of managing the data so that they can be studied. He further states that the cyclical process of data analysis (Figure 4: 1) focuses on:

- a) becoming familiar with the data and identifying main themes in them (reading);
- b) examining the data in-depth so as to provide detailed descriptions of the setting, participants and activities (describing);
- c) categorising and coding pieces of data and physically grouping them into themes (classifying); and
- d) interpreting and synthesizing the organised data into general conclusions (interpreting).

Figure 4.1: Steps in analysing qualitative data



Source: Gay and Airasian, 2000 (2005:186)

The researcher therefore analysed data from in-depth interviews, observations, documents, and study materials qualitatively to come up with significant themes and narratives. The data analysis was therefore interpretative, involving the categorising of the results.

The researcher's main aim was to write objective accounts which he experienced in the field. In order to do this the researcher was guided by the Tesch's eight-step method of analysing qualitative data (Babbie & Mouton 2004:490; Creswell 1994:155; De Vos 1998:343):

- a) Got a sense of the whole. The researcher achieved this by reading all the transcriptions carefully and jotted down ideas that came to his mind.
- b) Chose one transcript and went through it, asking what it was about. The researcher considered underlying meanings and wrote his thoughts down in the margin.
- c) Made a list of all topics. Clustered similar topics together and then arranged the groups into columns under major and unique topics.

- d) Took the list and went back to the data. Abbreviated the topics as codes and wrote the codes next to appropriate segments of text. Determined whether new categories and codes emerged.
- e) Used descriptive words to categorise topics. Then, grouped related topics together.
- f) Made a final decision about the abbreviations for each category and alphabetized the codes.
- g) Gathered data belonging to each category and did a preliminary analysis.
- h) Identified and reflected on relationships between categories, as those were the themes that formed the findings of the management of distance teacher education in Zambia.

The analysis of data obtained from interviews was therefore done through identifying common themes from the participants' description of their experiences about the management of distance teacher education in Zambia. Irrelevant information was separated from relevant information in the interviews. Relevant information was arranged into phrases or sentences which reflected a single, specific thought and these phrases or sentences were further grouped into categories that reflected the various aspects of meanings. It was those various meanings which were used to develop an overall description as seen by the participants (McMillan & Schumacher 2001:464).

4.7 Ethical considerations

Cohen, Manion and Morrison (2000:49) observe that developments in social science research in recent years have placed emphasis on moral issues where researchers have an obligation to respect and protect those involved or affected by their studies. They explain that ethical concerns in educational research are often complex, subtle and can sometimes place the researcher in a moral predicament that may be irresolvable. They explain that ethical issues may arise from any of the following: the context of the study, the procedures to be adopted, methods of data collection, the nature of participants, the type of data collected and that which is to be done with the data (Cohen *et at.* 2000:49).

In order to collect the needed data from the purposively sampled participants, the researcher sought permission through writing before going in the field to collect data. He was first authorised by the University of South Africa through the supervisor to embark on data collection. To conduct the study, the researcher sought and obtained permission from the Permanent Secretary and the managers of the educational institutions which were chosen for this study (see appendix 1). That was in agreement with Kombo and Tromp (2006:98) who emphasise the fact that a researcher requires a research permit before embarking on study. The heads of institutions granted permission and assured the researcher that he would be assisted with information provided the researcher acknowledged their contributions. Cohen *et al.* (2000:50) note that achieving goodwill and co-operation during field work is very important, particularly where the study extends over a period of time.

Concerning interviews, the researcher always asked interviewees to allow him to record their discussions. In all the instances the researcher was granted permission to have the discussions recorded and the interviewees did not mind that they could be identified through the description of their posts except for one interview with the Principal where he was told to only take notes due to the fact that the participant was not feeling well – had a dry cough. Getting consent of the interviewees was easy. The researcher assured all the participants that he was going to treat the information that he was given with the confidentiality that it deserved. This is in agreement with Lupele's (2007:129) views that interviews are interventions as they lay open thoughts, feelings, knowledge and experience of both the interviewer and interviewee. He says that interviewing often takes people through a thoughtful reflection on an experience of one's life. He, however, warns that the purpose of a research interview is to gather data and not to change people's attitudes and beliefs.

4.8 Summary

This chapter highlighted a number of procedures, which the researcher followed in conducting this study. An explanation was given concerning the participants in the research, the methods of

data collection and how data was collected and analysed. The data collection methods consisted of in-depth interviews, observations and the collection and analysis of relevant documents.

It was stated that qualitative analysis was not quantifying qualitative data but rather a nonmathematical process of interpretation, carried out for the purpose of discovering concepts and relationships in the raw data, in this case data on the management of distance teacher education in Zambia, and then organising them into a theoretical explanatory scheme. The researcher also explained issues of ethical considerations to verify that the study was conducted with due ethical considerations.

In the next chapter, the researcher presents the findings of the study.

CHAPTER 5

RESEARCH FINDINGS AND DISCUSSION

5.1 Introduction

The aim of this chapter is to report on the findings pertaining to the *Management of Distance Teacher Education in Zambia*. The views of the interviewees and information obtained from the observations and other relevant documents constitute the focal point of this chapter.

This presentation is once again based on the institutions of learning that the researcher focused on. They were the *University of Zambia*, the *Zambian Open University*, the *National In-Service Teachers' College*, the *Nkrumah College of Education* and the *Copperbelt Secondary Teachers' College*. These institutions had been involved in distance teacher education for some time, especially the *University of Zambia* which had been offering distance education programmes since its inception in 1966 (see section 1.2).

The main questions that were asked during interviews are as follows:

- a) What in your view is distance education?
- b) What do you think are the benefits or strengths of distance teacher education programmes?
- c) In your opinion, does management of distance teacher education influence the quality of education offered through distance education?
- d) What support services are given to distance students, and in your opinion, how effective are they?
- e) How do you communicate with lecturers and students, and in your view, how effective are the communication channels?
- f) Are the lecturers trained in distance education methodology, and are there continuing professional development programmes?

- g) How are the instructional materials prepared, and how suitable are they for distance students?
- h) What challenges do you encounter in managing distance teacher education?
- i) In your view, how can management of distance teacher education in Zambia be improved?

The identification and discussion of categories (themes) which emerged from the answers are dealt with in Chapter 6.

5.2 Research findings

The findings of this research were presented and discussed according to the research methods used. The research methods used were the focus groups and individual interviews, observations, and analysis of relevant documents such as modules and circulars.

The content of the focus groups and individual interviews, observations and information from documents (see section 6.1) was analysed using a code-category-theme process (McMillan & Schumacher 2006:389) in order to obtain comprehensive data analysis. The data from the interviews were therefore, analysed using the priori coding or preset categories, which implied that data coding began with a list of categories (see section 4.6). The comparative overview of the findings was then discussed to identify the common aspects of the management of distance teacher education in Zambia.

5.2.1 Interview questions and answers

As mentioned in section 4.4.1, focus groups and individual interviews were conducted with senior education managers at the *Ministry of Education*, heads of institutions offering distance education programmes, university and college of education lecturers, and some former and current students. The interviews lasted 30-45 minutes with the focus on the management of distance teacher education in their respective institutions. The following were the questions directed to the interviewees, not always necessarily posed in such a direct manner as given below

since the interviews were not formally structured (see section 4.4.1.1). Responses have been consolidated by the researcher. It should also be noted that the responses from all the interviewees mentioned above were considered since all the interviewees expressed themselves concerning the key aspects which featured in the interviews.

Question 1: In your view, what is distance education?

Answer: There was a consensus that distance education was a method of education delivery where the lecturer and the student are separated by space and/or time. The gap between the two, as has been mentioned in section 3.3, can be bridged through the use of technology – such as audiotapes, videoconferencing, satellite broadcasts and online technology – and/or more traditional delivery methods, such as the postal services (Chiyongo 2006:13). All the 67 interviewees defined distance education as education that one acquires by studying while at home or at the place of work. The student, however, goes to the institution that offers the programme or course once in a while to get assignments, study materials, and obtain clarification of difficult concepts. One interviewee, the Principal of NISTCOL, observed that "distance education is acquiring education through distance learning; that is learning without really being in contact with the teachers and the trainers" (interview # 3; also see section 4.4.1.2 which provides a table of all the interviews conducted). Another interviewee, a lecturer at UNZA, said:

To me distance education is a path opened to those who [want to study for higher] qualifications but not on full-time basis, but resident in their homes working if they are working and finding time to do pieces of work that might be received from the Directorate of Distance Education. It's not meant for people who are stranded. It's meant to open another avenue for people with similar qualifications but have opted to learn by distance education rather than learning on full-time basis. These people are either in employment or have other engagement which may prevent them from doing full-time studies (Interview # 16).

Some students defined distance education as a mode of learning which involves learning where one did not attend classes but received assignments and then sent them back for marking. One student interviewee from ZAOU defined distance education as follows:

I think its learning at home, where one doesn't stay in the institution which offers that service. Where one just goes and collects modules, comes back home and do the assignments and then examinations. For instance, in my case, I'm a teacher by profession, am studying with Zambian Open University and am in the fourth year; actually I'm almost graduating; learning throughout, and working" (Interview # 20).

Distance education was understood as a method of delivering education to people who chose to learn while they were doing other things. It was a method of delivering education to the majority of people who either could not find places in the conventional institutions or had other responsibilities that prevented them from studying full-time. Sometimes people just wanted to learn through distance education. The following were the opinions of interviewees about distance education:

- (a) Distance learning is when someone learns at home. The learning process is mediated by systems that are put in place in form of student support services.
- (b) Distance learning can be compared to correspondence studies.
- (c) Distance education is the type of education where the student and the lecturer are separated by distance; they may not have face to face interaction.
- (d) Distance education is education offered mainly away from the college; students have contacts with the lecturers for a short period. During that time they are given work which they carry home. Students do most of the work on their own.

(e) Distance education is a mode of study in which the student is separated in both space and time from the teaching staff. In this mode of study there is the use of media for communication and accessing content.

From the literature review (see section 3.8.3), and interviews, it was clear that distance education in Zambia involved studying at home or place of work and attending residential schools during limited specified times (also see section 3.8.4) either at the institution which offered the distance teacher education programmes or at a selected centre convenient to both lecturers and students. This view was confirmed by one student interviewee from ZAOU who stated that "distance learning is where a student does not sit in class *per se* with a lecturer. A student receives support through [a] modular system whereby the University prepares material and gives it to the student; then at a later date the student is invited to meet the lecturers so that he or she can iron out certain areas that were difficult to understand" (Interview # 21).

The research revealed that students, lecturers and distance education managers were in agreement about the meaning of distance education. As mentioned, one obvious and distinguishing structural characteristic of distance education that was common in all the definitions of the interviewees was the geographical or physical separation of the lecturer from the student, an aspect that is also prominent in many definitions of distance education (see section 3.3).

Question 2: What do you think are the benefits or strengths of distance teacher education programmes?

Answer: All the 67 interviewees were of the view that distance teacher education programmes were vital to the development of Zambia and indeed any other country in the world. Students, lecturers, heads of institutions and senior education managers at the *Ministry of Education* mentioned a number of benefits one would acquire by studying through distance education (Interviews # 1- # 32).

Interviewees were of the view that Zambia was still depending on conventional education where a lecturer was seen in front of the students. He or she would be talking to them and they would be listening to him or her. That kind of education was expensive and was not available to everybody. So in order to supplement those efforts there was a parallel mode, called distance education, where materials were prepared and made available to students to study in their own free time. The advantage of that was that people could do whatever they were engaged in doing, and when they found spare time they could use that spare time to study in order for them to learn and find themselves at the same level with those in conventional education. It was noted that distance education was not only beneficial to the student but also to the provider as indicated in this quotation obtained from the Dean of the *School of Education* at ZAOU:

So in a way it is an advantage to give a chance to those who may not access conventional education, and yet are enthusiastic about getting education. And we make that education available through distance education. As I said it's beneficial to the one who's receiving that education and also it's beneficial to the government ... (Interview # 25).

The interviewee quoted above, however, cautioned that unless the government and people accepted distance education as another way of providing higher education, education might not be provided to most of the teachers, and indeed to many people who were willing to acquire education. He elaborated as follows:

And I would like to say that the country itself has realized [that] there are a lot of efforts on delivery of education through distance mode. For example, within the Ministry of Education there's a Directorate of [Open and] Distance Education; they are producing very good material to help a person who is studying on his or her own (Interview # 25).

A student interviewee said that one of the strengths of the ZAOU was its ability to offer university education to as many people as possible. Many people especially teachers who did not have the opportunity to further their studies due to limited places at the *University of Zambia* were able to obtain degrees through distance learning.

Distance education offered the possibility of replacing conventional methods because of its theoretical advantage as well as proven practical advantages both to the providers and consumers. This interview excerpt from the Principal of NISTCOL seems to support this argument:

I think the strengths or benefits are related to the fact that students are learning and directly practicing in their schools. The other thing is that students learn without being removed from their centres, so the country is benefiting. The courses are meant to improve on their academic and professional aspects. You see a student is improving while working and to me that's a great benefit to the system (Interview # 3).

One of the major advantages of distance education noted in the interviewees' views was that it had financial benefits. Another directly related benefit was that distance education enlarged educational opportunity to groups of people, previously unable to benefit from traditional education, at costs which compared favourably with conventional education. Although distance education had high initial tuition fees, the latter became cheaper when the number of students increased. With regard to tuition fees one of the student interviewees from ZAOU observed, "...Zambian Open University has really helped teachers because we haven't been able to pay them. They haven't pushed us too much against the wall. Sometimes they would say pay so much, sometimes they have allowed us to go on like that until when that day reaches, then you pay" (Interview # 20). The majority of the 67 interviewees indicated that the majority of the students were able to pay their fees despite not being sponsored. They were paying from their salaries. Only 2 interviewees were not sure whether students were paying from their salaries or not.

Interviewees argued that distance education also allowed students to study at their own pace. It saved them from traveling to classes which sometimes could be tiresome. The Dean of the *School of Education* at ZAOU said that students could study whenever they found spare time. They used the spare time to do their assignments. In this way, they could learn and be at the same level with those in conventional education (Interview # 25).

Distance education was considered to be a very important and expanding mode of education delivery. All 67 interviewees said that distance education should be supported. The importance of distance education is elaborated in this statement:

Well, distance learning or education is now a global methodology of education delivery. Distance education should be regarded as good as full-time mode. A lot of people need to advance; they may not be allowed to leave work, so they can learn through distance education mode. Distance education is important. It should not be looked down upon by anybody. In the near future there will be no permission to go for further studies; but distance education will be the preferred mode of learning (Interview # 15).

As a way of improving distance education at UNZA, there was an appeal at the time of the interview that the *Directorate of Distance Education* should implement the suggestion that the *Directorate of Distance Education* be turned into an *Institute of Distance Education*. It was also suggested that UNZA should develop higher courses that would enable students complete their courses through distance. "We want a situation where distance students are doing master's programmes. This is long overdue" (Interview # 16). The importance of distance education was supported by a student who said: "I think the *Ministry of Education* should work in conjunction with the *Zambian Open University* because that is the only way teachers can have a chance to attain university education" (Interview # 20). Therefore, it was suggested that ZAOU should build permanent structures to avoid moving from one place to another during residential schools as was the case at the time of the interview.

Question 3: In your opinion, does management of distance teacher education influence the quality of education offered through distance education?

Answer: All interviewees, including students, indicated that the management of distance teacher education had an influence on the quality of education that students acquired. This interview excerpt obtained from a lecturer at UNZA seems to reflect this understanding:

I want to mention that there's a connection between the quality of education offered to students by distance education and how distance education programmes are managed. As you know we've both full-time and distance students. The selection criteria for these two groups are the same. The prerequisite for the candidates is a diploma from our affiliate colleges like NISTCOL. As much as possible we give them the same or similar assignments, and the same number of assignments with full-time students. We also give these distance and full-time students the same tests, [regardless of] whether they pass or fail. And they also write the same examinations (Interview # 11).

The distance education practitioners were responsible for the smooth running of the distance teacher education. The Assistant Dean I at UNZA observed that:

Yes, there has to be a link because if a distance programme is poorly managed it will follow that the quality will be poor. On the other hand if the distance programme is well managed it follows that the quality of learning or quality of tuition will also be high. So there is a relationship (Interview # 15).

Apart from the *University of Zambia* which only offered distance education courses up to second year level before students have to transfer to full-time studies, due to the fact that the institution was unable to develop instructional materials for upper level courses, all the other four institutions offered distance education programmes that enabled students to complete their studies through distance education. The *Zambian Open University* was the only institution among the five institutions which was not a dual institution. It offered all its programmes through distance mode.

Interviewees from the Zambian Open University, however, expressed mixed feelings about studying by distance education and then having to transfer to full-time studies. The majority of interviewees were those who wanted students to complete their programmes through distance learning. They said that it was better to complete the programmes through distance mode

because of various reasons such as family responsibility, commitment at places of work and it was difficult to get sponsorship and study leave. They said that through distance education they would struggle to pay for themselves. For example, a student interviewee from ZAOU said: "Usually in my case the biggest problem has been that of settling my fees. Payments have really given me some hell. But I am making sure that I pay" (Interview # 20). However, one of the students from UNZA who wanted to transfer to full-time had this to say, "In my view, it's better to convert to full-time because it's difficult to learn by distance only because there're no materials, especially when it comes to writing assignments" (Interview # 18). This argument was supported by another student from ZAOU who suggested that resident tutors in the provincial centres should be given sufficient materials in form of reference books that they can lend to distance students (Interview # 21).

The ratio between those who wanted to stick to distance education and those who wanted to change to full-time studies was approximately 7:3. At UNZA, the majority of the 7 student interviewees wanted to complete their studies through distance education due to limited accommodation at the University and the challenges that they faced to obtain study leave and sponsorship. Only 1 seemed to be satisfied with the arrangement of transferring to full time (Interview # 18).

As regards performance of distance education students at the *University of Zambia*, lecturer interviewees from UNZA said that on average full-time students did better than distance students. In some cases, one or two distance students would get very high marks. The difference in performance was due to the fact that full-time students had facilities such as the library which distance students did not have. They were also taught throughout the semester (Interview # 11). It meant that distance education mode was different from the conventional education. While in the conventional education there was a teacher in front of the students explaining the difficulties that they might face, in the distance mode instructional materials were expected to be talking to the students.

An interviewee, a lecturer from UNZA, had this to say:

Full-time students perform better than distance students because they have facilities that distance students don't have; facilities such as the library. They also interact with their colleagues on [a] daily basis. It's difficult to learn by distance education, especially at higher level, 3rd and 4th year. However, there're some discussions of trying to make these programmes to be offered by distance mode only. At the moment they learn by distance then transfer to full-time studies (Interview # 11).

The interviewees (Interview # 12 & # 8) further revealed that the *Directorate of Distance Education* of the *University of Zambia* was responsible for the administration, organization and coordination of all distance education courses. The *Directorate of Distance Education* enrolled students, kept students' records, printed and distributed study materials. It also arranged the Residential School, provided counseling and other support services in conjunction with relevant departments and units of the university. In addition, the *Directorate of Distance Education* of the *University of Zambia* with the academic office arranged examination centres. All tuition and examinations were the responsibility of the schools that offered courses through distance education. This was echoed by a number of interviewees. For example, one interviewee had this to say:

...What we're doing is to coordinate distance education programmes. The teaching staff come from other units. What I'm trying to say is that this is a dual mode institution, so lecturers know that when they are employed as lecturers they are expected to teach both full-time and distance students, but in the current proposal where we shall no longer be a Directorate but an Institute of Distance Education there is a provision to employ our own lecturers (Interview # 13).

The interviews (Interview # 1- # 32) indicated that the management of distance teacher education influenced quality of education that students acquired. For instance, the Principal of NISTCOL said that in their institution there was a department of distance education which ensured that members of academic staff wrote study materials according to the requirements of distance education materials. There was a strong feeling that management influenced the quality of

education because it guided distance education practitioners in almost all aspects of distance education. This interview excerpt seems to reflect this understanding:

...both in terms of distance learning and full-time or face-to-face learning, management does influence the quality of learning or quality of education that our students acquire. In education, for example, the students will have library learning facilities and also the facilities for teaching. The library facilities include books and computers. There will be accepted or required teaching and learning materials for students to progress in their studies. So it means that management has great impact on the quality of education that students acquire (Interview # 3).

Some student interviewees from NISTCOL said that they were happy with the way distance education programmes were being managed. In this regard, it was said: "I think, we're impressed with the way the programme is being run because it has enabled us to complete the course while doing our work. The course has been administered very well. Every time we come here they give us assignments and when we come back to college we give the assignments to our lecturers for marking" (Interview # 5). However, some student interviewees during the same interview were of the opinion that distance teacher education programmes were not being managed properly because some lecturers were not serious about their work. They simply photocopied materials from the book, and were unable to explain clearly certain concepts. In this regard, one student interviewee from NISTCOL said: "some lecturers are unable to speak convincingly about the contents in the module. It is better for a person to be trained before training others" (Interview # 6).

At the *University of Zambia*, there was a committee called a *Senate Committee of Distance Education* which ensured that quality was maintained. Most interviewees at the *University of Zambia* indicated that the Vice Chancellor was the Chairperson of the *Senate Committee of Distance Education*. The Director of the *Directorate of Distance Education*, the University Librarian, and the Deans of the schools which offered distance education courses, for instance, the Dean of School of Education, and the Dean of School of Humanities and Social Sciences, were members of the *Senate Committee of Distance Education*. The Secretary was the Assistant

Registrar. Additionally, the Director and the three Coordinators of the *Directorate of Distance Education*, and lecturers made sure that course materials were of high quality (Interview # 12).

One of the interviewees, the Head of the *Advisory Unit for Colleges of Education*, observed that "[a]t the *University of Zambia*, the management of distance teacher education is the responsibility of the *Directorate of Distance Education*. I just teach distance students who study the subject that I teach" (Interview # 10). This was supported by interviewees from the *Directorate of Distance Education* who said that their job was to coordinate distance education programmes; the teaching staff came from other units (also see Figure 3.3).

The members of staff from Zambian Open University who participated in the interviews revealed that Zambian Open University had schools and committees that administered, organized and coordinated all distance education programmes. The school of education enrolled students, kept students' records, printed and distributed instructional materials. The school in conjunction with the academic office arranged the examination centres. All tuition and examinations regarding distance teacher education programmes were the responsibility of the school of education. One of the problems faced by ZAOU was limited full-time staff as one interviewee indicated:

A smaller segment of lecturers are full-time, they hold key positions in the departments, but many are part-time lecturers, and I think that is one of the challenges we need to address because these part-time lecturers sometimes are not as dedicated as they should be or they are too committed with their own responsibilities (Interview # 17).

It was also noted during the interviews (Interview #s 26, 27, 28, 29 & 30) that the two colleges of education, namely NCE and COSETCO, had *Directorates of Distance Education*. Each of the *Directorates of Distance Education* in conjunction with the college administration was responsible for the administration, organization and coordination of the STDDL. The *Directorate of Distance Education* enrolled students, kept students' records, and printed and distributed study materials. It also arranged contact sessions, provided counseling and support services in conjunction with relevant departments in the college. All tuition and examinations were the responsibility of the *Directorates of Distance Education* in conjunction with the college

administration. One interviewee, the Principal of NCE, had this to say: "The committee was also responsible for monitoring all students, and administration of tests and examinations. Generally, the committee worked closely with the College Management to ensure the smooth running of the programme" (Interview # 29).

NISTCOL had a *Distance Education Coordinating Committee* which operated directly under the *Distance Education Department*. The *Department of Distance Education* therefore, was responsible for the administration, organization and coordination of the distance education programmes. The *Department of Distance Education* like other institutions enrolled students, kept students' records, printed and distributed study materials. It provided counseling and other support services in conjunction with relevant departments. All tuition and examinations were the responsibility of the *Department of Distance Education* in collaboration with the *Examination Committee* and the College administration. One interviewee, a lecturer from NISTCOL, said that NISTCOL was the only college that had a *Department of Distance Education* (Interview # 1). Indeed, the findings from observation confirmed that NISTCOL had a Department of Distance Education programmes.

The study revealed that management of distance teacher education had direct influence on the quality of teacher training through distance mode. It is therefore important for policymakers, planners, administrators and distance education practitioners to ensure that all aspects of distance teacher education management are taken care of.

Question 4: What support services are given to distance students, and in your opinion how effective are they?

Answer: The interviewees were generally of the opinion that support services were efficient. However, some interviewees, especially students, as will be shown, felt that the support services were not effective enough.

According to the interviewees there was a variety of ways in which different institutions provided counseling or support services to their students. The different methods of providing student support at the five institutions, namely the *University of Zambia*, the *Zambian Open University*, the *National In-Service Teachers' College*, the *Nkrumah College of Education* and the *Copperbelt Secondary Teachers' College* were presented and discussed according to how interviewees thought the mentioned institutions were supporting their distance students and how they thought the support system they had in place was contributing to the effectiveness of the distance education courses or programmes (Interview #s 3, 8, 12 & 29).

The development and maintenance of student support services is of vital importance in distance education. All the 67 interviewees including student interviewees were of the view that the importance and perhaps indispensability of student support services laid in the fact that high retention and completion rates were positively related to the provision of effective counseling and support to distance students (Interview #s 23, 26, 29 & 30). One of the interviewees at DODE said that

distance education needs proper management. Without proper management there would be no learning at all. In the management structure there should be a section that looks into [student] support services. If student support services are not managed properly then the quality of education will be affected (Interview # 31).

Student support services are important in breaking the isolation that distance students experienced because they provided encouragement and motivation. It was noted during the interviews that there was no universal print for the design of student support services (Interview # 29). However, the various factors that according to the interviewees needed to be taken into account in the planning of student support services in a distance learning system are as follows:

- (a) characteristics of students;
- (b) the demands of the programme;
- (c) the geographical environment;
- (d) the technological infrastructure;

- (e) the scale of the programme;
- (f) the requirements of the management.
- Student Support Services offered at UNZA

As indicated in sections 1.2 and 3.7.1, the *University of Zambia* is a dual mode institution which means that the University has both full-time and distance students. The core function of the *Directorate of Distance Education* at the institution is coordinating distance education activities. One interviewee, a lecturer at UNZA who felt that student support was not efficient said:

As at now in terms of student support we've very old batches. There are no modules in place, there are [only] batches [collection of notes for distance students]. The collection was done some time back. [Some batches were compiled] in 1996. These are batches being used today, 2009. So that doesn't give much support, and the residential school which is some sort of support to the students is not long enough for students to sufficiently gain from distance learning. That's the only face-to-face contact they have with lecturers. ... I don't think there's much support we give to these students. And besides that, the world is changing; the internet seems to be another way of supporting distance students. We have not even begun availing this wonderful knowledge to our students. There were efforts to [install] internet facilities in the provinces or in various zones but this has not come off the drawing board. I wished it did. So students are mainly depended on the old batches and what they get from the residential school (Interview # 16).

However, it also seems that at the time of the interview, the *Directorate of Distance Education* at UNZA had done a lot to support its students. Some interviewees said that the *University of Zambia* supported students in many ways. One HOD from UNZA said: "We support our students in many ways. Students are given batches in the various courses that they take. At the moment we're writing modules that will replace these batches. We also have [periodical] residential schools where students meet lecturers and professors who give them assignments" (Interview # 17). The interviewee also indicated that UNZA had a *Department of Adult*

Education and Extension Services that had regional centres in all the nine provinces of Zambia. Those regional centres have full-time resident lecturers who guide and counsel distance students. Through the regional centres distance students may access internet facilities too.

The *Directorate of Distance Education* of UNZA has a coordinator of student support services. The coordinator coordinates all the activities related to student support services. For instance, in conjunction with other members of staff in the *Directorate of Distance Education*, he ensured that students had one residential school that lasted a month. During that time students were given face-to-face tuition and counseling, and had an opportunity to access full library services. The coordinator also ensured that instructional materials and assignments were delivered to all students either through post or during face-to-face contacts. However, it was noted that the best time for students to receive their instructional materials, was during residential schools for distance students. One lecturer explained the importance of residential school in this way:

Residential school provides them with an opportunity to interact with their lecturers. And during the residential school, lecturers are really supposed to concentrate on addressing problem areas in each course and equipping the learners with study skills and how they can solve the problems when they are studying on their own. In fact even before the start of the residential session we write students a memo indicating how they can be helped (Interview # 13).

Most of the students interviewed confirmed that residential schools were beneficial to them. One student said "[r]esidential schools are good. We interact with lecturers and our fellow students. This is the time when we're kept busy, and we also go to the library" (Interview # 18).

As regards assignments, at the beginning of every academic year, the *Directorate of Distance Education* of UNZA prepared a schedule of assignments that indicated dates for submitting assignments. So as students were sent study materials or as they collected their study materials, the schedule of assignments and assignment questions were also provided. That helped them to observe deadlines given to them by their lecturers. The university was flexible to students whose assignments arrived after the date of submission: "If the student was sick and gives a medical

report then it's our responsibility to explain to the lecturer that we've documentary evidence that the student was unwell. So although the assignment had been submitted late the student should be assessed" (Interview # 13). Another lecturer interviewee supported this view as follows:

Well, there's really a grace period for such cases. As distance education practitioners we try to be a little bit flexible. When we can show that the student actually received the assignment late and the student posted in time but it took long to arrive, we give some consideration. Aaah, it's not easy because we're also trying to stop students who are trying to abuse the system by sending assignments late (Interview # 14).

A focus group interview with students (interview # 19) revealed that assignments sent to students sometimes took a month or two. By the time the assignments reached students they would remain with only very few days to write and submit them. In some cases, they were penalized by the consequent subtraction of marks which was described as unfair by students.

• Student Support Services offered at ZAOU

The Zambian Open University offers all its programmes through distance education. Student support services are therefore needed for students to continue studying and consequently complete their studies. Interviews revealed that the major support that was given to students was the provision of instructional materials. Students were given study materials in the form of modules which were described as interactive by most of the interviewees. In this regard, one lecturer said:

So we've to be careful that we write the materials in such a way that we are speaking to the students. So that when he's reading [it's not] like he's reading a text book but rather he's listening while reading, like he's listening to the teacher who's talking to him. Therefore, great care should be taken in terms of how the materials will be presented to the students (Interview # 25).

However, some modules that the researcher looked at were not as interactive as they were claimed to be. One student had this to say: "In some courses ... like in my case, I do English, courses, like psycholinguistics and sociolinguistics, the language was not friendly, and so I found it a bit difficult to understand those modules. But [for] most of the educational courses, the language was easy; I could easily understand" (Interview # 20). Another student interviewee had this to say:

I think the modules which are being produced at Zambian Open University are modules which contain materials suitable to learning at a distance, and give students enough guidance. These modules can be used by any institution of learning (Interview # 21).

However, a concerned student interviewee lamented that "[s]ome of the modules are not well prepared. Sometimes you see wrong spelling, incomplete sentences and so on. It seems some of them were written in a hurry" (Interview # 22). Another lecturer interviewee had this to say concerning suitability of the modules: "I think we've tailored them to that kind of conversation [meaning that the modules are suitable for distance students]; so far they have proved to be helpful. They have attracted the market. A lot of outsiders want to buy them; in fact not even buying - they steal them or photocopy them from our students. So that's a bit of a worry for us. People are suffering to produce them ..." (Interview # 24).

Perhaps the support services given to distance students could be summarized in the words of a lecturer interviewee:

Eeeh, we're quite young but we're trying to do certain things. First of all we've what we call residential school; two weeks in one year we invite students to come in and listen to the lecturer and get material directly from the lecturer's mouth, on the face-to-face fashion. And secondly, apart from the residential school, we've asked students to form groups, study groups where they meet and make one of them a leader or convener who will be a person to introduce a topic and let everybody take part in the discussion. Thirdly, there're in some courses certain tapes or CDs on which lectures

have been recorded and these are sold to students and students in their spare time can listen to them. Where they don't understand they can replay so that they understand. Fourthly, there's something that we'll be entering into very soon. And this is the use of the internet to distribute material to students (Interview # 25).

The information from interviewees indicated that ZAOU was still a new institution (see sections 1.2 & 3.7.2) trying to support its students to improve performance and increase retention and completion rates. However, there were major challenges related to the assignments and examinations. Some of the assignments that the institution sent to students arrived late. Students did not have sufficient time to do their assignments. Some modules were also sent to students late (interviews #s 20 & 22). Sometimes students received the modules when they were about to write the examinations. Another challenge was that of missing marks. Some students did not have marks in some courses even after having written the assignment or the examination (Interview #s 21, 22 & 23). Records management was therefore an area that required improvement. Concerning assignments, one lecturer interviewee, commented as follows:

A good number of students abide by the deadlines but a good number again don't, and as a school we've been really lenient because as adult students we understand their problems too. So we accept those assignments which may come in a little later. Yaah, but we encourage them to be on time. We also encourage them to let us know if they face problems so that we know what is happening (Interview # 24).

• Student Support Services offered at NISTCOL

NISTCOL is a dual mode institution. At the time of the interview it was offering three programmes through distance education (see section 1.2). The information gathered from interviews revealed that NISTCOL had a number of support services which encouraged distance students to continue studying while registered for a distance education programme (Interview #s 1, 2 & 3). The PTDDL programme was offered in conjunction with the satellite colleges whose tutors were trained by NISTCOL. Many lecturers, including the college management, were

trained in distance education methodology and were therefore able to support their students. An interview with the HODs at NISTCOL revealed that 50% of the lecturers had been trained in distance education methodology with the *University of South Africa*. One HOD said:

Those who have undergone further training with the University of South Africa are 22. Currently, there are 35 to 40 lecturers in the college. So, 22 out of that number of lecturers is about 50% of the lecturers that have been trained. Even others who haven't gone through formal training have been inducted in the writing of distance education materials, through workshops and [seminars] (Interview # 2).

The student support services offered by NISTCOL were many but were not very different from those offered by other institutions. They included the provision of instructional materials such as modules, face-to-face contacts and marking of assignments. The main reason was that the geographical environment and technological infrastructure where its students lived were similar. The majority of the students pursuing teacher education programmes in those areas were already teachers. They were simply upgrading themselves (Interview # 1).

Information obtained indicated that of the three programmes that NISTCOL offered through distance education, STDDL did not have modules. Lecturers used batches. In some cases, lecturers did not even prepare notes but simply photocopied everything from books. Students complained of the poor quality of the materials that they were given (Interview # 4).

However, NISTCOL had the first version of PTDDL modules on CDs although the latest version of the PTDDL modules was not recorded on CDs. In this regard, one lecturer interviewee said:

If we're given money and have time, definitely we should put these modules on CDs, audio tapes, online and so on so that the students can access this information. One can understand the modules, but not as much as one can hear and read. So, we need a combination of all the modes of communication so that at least different students will learn differently. In this way, they will be helped (Interview # 3).

Interviewees indicated that most adult students needed some guidance and help if they were to continue with their studies:

As a college we provide student support in terms of modules which are student friendly ... so that each student has a module as a key learning facility. Aaah, as lecturers we also meet students face-to-face once in a while, that's once in a term. We also encourage them to have study groups at their homes, especially at the teachers' resource centres. There they access some additional reference books. However, the modules themselves are almost complete so to speak, but they also need additional reference materials (Interview # 3).

Like at the other institutions, the contact sessions at NISTCOL were compulsory. If a student missed two consecutive sessions, then he or she would be expelled. For that reason even female students who were almost to deliver, attended contact sessions. Even those with babies were forced to attend these residential schools, especially when they knew that they were going to write their promotion or final examinations (Interview # 2).

Another support that lecturers gave students was the comments that they wrote in the assignments. For example, one lecturer interviewee claimed: "We gave them assignments. The marked assignments had building comments. That was how we accrued the continuous assessment that we presented to UNZA" (Interview # 1).

Additionally, NISTCOL organised residential schools in order to allow students to interact with lecturers and their fellow students. During the face-to-face contacts, lecturers discussed with students topics that students may not have understood when they were alone. Residential schools also accorded students an opportunity to use the college library. One student interviewee had this to say about residential schools "We're normally given assignments when we come for residential schools" (Interview # 5).

Physical infrastructure was one of the negative factors concerning student support that was raised. NISTCOL had not expanded in terms of student hostels and lecturers' accommodation. The hostels for students were sufficient for full-time students but not distance students, especially STDDL students. STDDL students were about four times the number of full-time students. The interview with lecturers and students revealed that some students were accommodated at *Mukamambo Girls' High School* which was located near the college. Students complained that the rooms were not enough to accommodate all of them. Some students were therefore forced to be day scholars. When students were asked about the cause of the problem they said that the college had over-enrolled (Interview # 4).

Over-enrolment was one of the factors that negatively influenced the management of distance education at NISTCOL. As seen, the problem of inadequate accommodation resulted from over-enrolment. This was confirmed by a student interviewee who said that there were many students, about two thousand students. Because of the big numbers students had to strain themselves in order to obtain facilities and other requirements for their course (Interview # 5). However, one student interviewee attempted to negate over-enrolment: "Not over-enrolment, but there's high demand for higher education from teachers" (Interview # 4). It has to be borne in mind that the majority of the primary school teachers in Zambia hold primary school certificates and want to upgrade themselves to a diploma level (see section 1.2).

Insufficient library resources also affected distance education negatively. The libraries in the country, where distance students were found, were not equipped with books that students could use. Concerning inadequate materials in the libraries, one student interviewee at NISTCOL said that the college library had very few books (Interview # 6). Another student interviewee said that the books were not enough because when one needed a book he or she would find that it was already borrowed by someone else. Concerning the situation of libraries in the country, an HOD explained as follows:

The other challenge that we've as a college is that, just as much as we would like to help the students, most of them come from areas where they can't access libraries. So, even if you want to give students reference materials, you can't even know what kind of references they can access. So, one

biggest challenge that we've as a college is that our country doesn't have libraries that can accommodate the work that our students are doing. So, in most cases they would do the assignments when they are in the college. Unfortunately we also do not have books which can cater for the number of students that we have (Interview # 2).

As have already been mentioned, distance students struggled to write their assignments due to inadequate reference books in the libraries. In some cases there were no libraries where distance students would go and research. Additionally, some students received their assignments from the college late. These problems had contributed to some students submitting their assignments late as well. Another issue about assignments was that the questions that lecturers set did not compel students to read on their own (Interview # 2). This was confirmed by an HOD as follows: "The other problem was that the type of questions that we set for DEM students. I think we need to set the type of assignments that will make students go through the module even while they are away from the college" (Interview # 2).

• Student Support Services offered at NCE and COSETCO

The Nkrumah College of Education and the Copperbelt Secondary Teachers' College offer distance teacher education programme called STDDL (see sections 1.2, 3.7.4 & 3.7.5). The two colleges are dual mode institutions, which means that they had full-time and distance students using the same lecturers. While full-time students have always had an opportunity to be met by their lecturers regularly from time to time, their counterparts, the distance students, did not have that chance in the past. This situation compelled the lecturers to introduce a residential school where distance students could be met face-to-face during school holidays. The interaction was appreciated by students who used the opportunity to research and write their assignments (Interview # 30). One of the lecturer interviewees at the Nkrumah College of Education had this to say:

When it comes to organization, eeh, our distance education programme was a combination of modular system and the face-to-face. During those face-to-face contacts which initially lasted for three weeks, we provided them with

modules and thereafter we would explain to them the topics that they could not understand when they were reading on their own. Face-to-face sessions were also meant to help them to supplement what was written in the modules. As you know the module can't contain everything - hence the need to teach them. Also during face-to-face sessions they were given an opportunity to use the college library (Interview # 30).

During the residential schools, students have access to the college library. This is also time for lecturers to receive completed assignments and to give their students new assignments to take home. Some students do not post the assignments, instead they hand them in during residential schools:

When they were in the college, we used to give them assignments to go and work on them at home. The major complaint was that they didn't have enough time to work on them because they were still expected to work full-time and write lesson plans every day, according to the new regulations. And they were inspected throughout the term by standards officers. So, the major complaint from students was that of not having adequate time. Some of them would even come slightly earlier in order to work on their assignments. We helped them in a way because most of the assignments that we gave them were expected to be handed in just when they arrived. But when they said that they had not finished writing we would allow them to continue writing while they were in the college and hand in before they left, as well as carrying new assignments (Interview # 28).

According to the interviews related to NCE and COSETCO, distance education had various forms of managing it but it depended on the group of students and those managing the distance programme. The major student support services chosen by NCE and COSETCO were the handouts and residential schools. Those handouts were given in advance at residential schools so that when students went for another residential school, lecturers would explain the concepts that students found difficult. Practical activities for subjects like Home Economics were done during residential schools (Interview # 28).

From the information gathered through interviews about student support services at the two colleges, it was clear that students were being supported but did not receive as much support as they required. Much support was needed to break the isolation that they experienced when they were alone in their schools (Interview # 29). Student support or counseling, in all its various forms, was considered a vital component of distance education (see section 3.8.3). Without it, the effectiveness of distance education would be questioned (Interview #s 28 & 29). However, the staff was willing to be trained as distance education practitioners so that they would function efficiently and effectively (Interview # 26 #28).

Question 5: How do you communicate with lecturers and students, and in your view, how effective are the communication channels?

Answer: There was no agreement in the responses to the above question. Some interviewees, particularly distance education practitioners and some students, especially those in urban areas, were of the view that there was no serious problem as far as distance education delivery was concerned. However, there were concerns that assignments and study materials were not delivered to students at the time when they were needed (Interview #s 20 & 23).

Two-way communication is vital for students who have just enrolled at a distance education institution since they are at high risk of dropping out. The need for identification with the institution which provides the distance teacher education programme and involvement in its social system is greatest when students enroll for the first time. At this point the institution is advised to be in close contact with its students. Failure to achieve this may lead to many students dropping out (see section 3.12).

Interviewees felt that there was a need for two-way communication in the selected institutions that offered distance teacher education courses or programmes. The concerned institutions again were: the *University of Zambia*, the *Zambian Open University*, the *National In-Service Teachers' College*, the *Nkrumah College of Education* and the *Copperbelt Secondary Teachers' College*. They are discussed according to how interviewees thought they were communicating

with their distance students and how they thought communication was contributing to the effective management of the distance teacher education.

• How UNZA communicated with distance students

Distance education at the *University of Zambia* fitted into the integrated model of distance education in which internal courses were offered to distance students by the same, regular academic staff. The *Directorate of Distance Education's* role was to coordinate distance education activities (see section 3.7.1). Smooth management of the distance teacher education required good communication network.

The information gathered from interviewees and observation indicated that there were a number of ways the *Directorate of Distance Education* communicated with their students. The post was the main mode of communication. The *Coordinator for Students Services* ensured that instructional materials and assignments were delivered on time to all students through post (Interview # 8). However, there were challenges related to postal services in Zambia as noted in the following quotation:

Three quarters of the materials reach the students. But the problem is that some of the postal boxes of our students are closed. Those who don't have their personal postal boxes, rely on their relatives' postal boxes. When these people are transferred the boxes are closed and the mails are returned (Interview # 8).

Indeed, there were many problems that the *Directorate of Distance Education* faced regarding the mail of the distance students. In addition to the problem cited above, was the issue of some similar names. For example, the mail for a student in Mongu, in Western Province would be directed to Mungwi in Northern Province. The time the material or assignment would be sent to the right place it would be too late (Interview # 12).

Fortunately, the *Directorate of Distance Education* had gone into partnership with *Zain Mobile Service Provider*. Zain has almost 100% coverage; so it then became possible for the

Directorate of Distance Education to communicate with their students at a reduced cost (Interview # 8). Apart from the postal services and mobile phones, the Directorate of Distance Education communicated through national and private televisions, national and community radios and the print media, especially for making announcements. The Directorate of Distance Education established that all the students had mobile phones and assignments or notices could therefore be given to students through mobile text messages. The institution was able to select the appropriate mode of communication to be used. Communication with students, as indicated by many interviewees, was not a big problem as indicated in the following statement:

We've various means of communication modes. We use the eeeh, newspapers. We also use our resident lecturers where we send specific messages. In an event that students go there then they will see those notices. We also ring them; you know nowadays, everyone has a mobile phone. Sometimes we issue announcements on television. For example, we recently issued an announcement on the television. However, we don't just issue for the sake of issuing, we look at an opportune time. For instance, last time we issued one during the match between Zambia and Egypt (Interview # 12).

Lecturers at the main campus communicated amongst themselves and with those in the provincial centres through e-mail. According to the survey that was taken in all the provincial centres, there was a potential for ICT. What was needed was a policy to equip these centres and streamline how materials would be developed and downloaded (Interview # 12).

• How ZAOU communicated with students

During the interviews, it was learnt that *Zambian Open University* had regional offices in big cities, managed by full-time employees called centre managers. They communicated with the students using various modes of communication. The various modes of communication included talking to students and putting notices at strategic places. They acted as a link between students and ZAOU. The University management also communicated directly with students through the press.

The university also gave students an academic calendar which indicated the dates for various events including examination dates and publication of results. ZAOU also used radios and televisions. Students communicated with their lecturers and management using phones, particularly mobile phones. In that regard, one interviewee said: "[s]ometimes students phone us and the University also phones them" (Interview # 23). Another interviewee explained as follows:

We've various ways of interacting with our students. First of all, we communicate with our students through the television. We know and we realize that television is not country wide. There are certain places where they can't view television because of poor facilities. Secondly, we use something that is better than television, this is radio. It's cheaper, it's readily available and we've got a lot of stations: the national [radio] station and private [radio] stations to which we send these messages, and then broadcast them to the provinces or districts and students who are there are able to listen to us. Aaah, thirdly, we've got in each region a centre, mostly in provincial headquarters. And these are centres where students go to for information and clarifications. We have found this to be very good. Where the information is not readily available then the centre manager will get in touch with the headquarters which will supply that information. And the headquarter will broadcast that kind of information (Interview # 25).

At the time of this study, information communication technologies had not been explored as a means of communication. One of the concerned interviewees stated that as the number of students grew larger and larger there was a need for them to use ICT. He said that it would be faster even to disseminate learning materials (Interview # 24). The view was supported by other interviewees who stated that the level of communication infrastructure determined to a significant extent the level of support services provided to distance students.

• How NISTCOL communicated with distance students

During interviews the researcher learnt that mobile phone providers had made communication with students easier. The lecturers and management at the *National In-Service Teachers' College*, like other institutions, communicated with their distance students through phones. They also used fax facilities although it was noted during observation that the college did not have a fax facility. They went to the *Ministry of Education* Headquarters to fax messages to satellite colleges (Interview # 2).

Depending on the urgency of the message, especially messages related to graduation ceremonies, the management used both private and public media. They included radios, television and newspapers. It was also noted that students interacted with their lecturers during face-to-face contacts and when lecturers went to monitor them. When lecturers went for monitoring, they were usually given information by the college management either in writing or verbally to deliver to the students.

The *National In-Service Teachers' College* also communicated with distance students through email. The information obtained from interviewees showed that the college had internet facilities (Interview # 2). In this regard, an interviewee noted the following: "Also the college has internet. We have e-mail addresses, so we get in touch with them. Sometimes we obtain information from district education offices. However, getting information from District Education Board Secretaries and District Resource Centre Coordinators has proved difficult" (Interview # 1). However, it seems that the *Department of Distance Education* tried to disseminate or obtain the required information.

• How NCE and COSETCO communicate with students

Most of the interviewees at the *Nkrumah College of Education* and the *Copperbelt Secondary Teachers' College* indicated that they communicated with their students through television, radios, newspapers, mobile phones and fax. The choice of the mode of communication depended on the nature and urgency of the message to be conveyed. One interviewee explained:

"[i]n terms of communication, we used to communicate through the press, and by giving the information to provincial and district offices, and then they would communicate to teachers in their places. They used to help us a lot" (Interview # 28). However, it was also discovered during the interviews that a lot of information that students needed was given either in writing or verbally during residential schools. The two colleges also admitted that they did not explore ICT to the benefit of their clients (Interview #s 28 & 30).

Question 6: Are the lecturers trained in distance education methodology, and are there continuing professional development programmes?

Answer: There were different answers to this question. Interviewees, particularly at UNZA and NISTCOL said that lecturers were trained through workshops and short courses. However, at UNZA some interviewees were of the view that the workshops that lecturers attended did not equip them with skills to manage distance teacher education effectively. At ZAOU there were no planned activities meant to improve professional capacity of lecturers. However, ZAOU's administration had the prerogative of sending lecturers to some workshops within the Southern African Development Community (SADC) (Interview # 25). One would think that being a new institution offering distance education programmes, there was supposed to be a policy on continuing professional development of both academic and support staff.

The researcher noted during the interviews that all the members of staff in the institutions that he focused on were willing to be trained in order to be more efficient and effective in the way they managed distance teacher education. The interviewees' views concerning training and continuing professional development were supported by literature reviews on the need to train distance education practitioners. For instance, the literature review has shown that continuing professional development provides distance education practitioners with knowledge and skills to do their work efficiently and effectively (see section 3.8). One of the interviewees at UNZA regarded training of lecturers and other members of staff as extremely important. He said: "Training lecturers as distance education practitioners is vital. We intend to train the staff so that they can understand the principles of distance education" (Interview # 13). The importance of continuing professional development is also dealt with at length in the literature review (see

section 3.8.1). Indeed, the development and production of distance education friendly instructional materials require someone who is well trained (see section 3.8.4). An interview with another interviewee revealed that some lecturers at UNZA have some formal training in distance education as indicated below:

By experience we also mean that a lot of our staff have been trained. They are fully trained distance education providers. The Directorate of Distance Education has been conducting training sessions for academic staff involved in distance education. A lot of us have received training, we even have certificates in distance learning materials design and so on. So we've a reservoir of staff that have participated in distance education for a long time and are fully trained (Interview # 15).

The views of the interviewees regarding training of staff at UNZA meant that training was a continuous process. It was an ongoing activity as it was evident in the interview with one of the interviewees, the HOD for *Educational Administration and Policy Studies* at UNZA:

Yes, lecturers have been trained. The Directorate of Distance Education has been mounting training workshops for us. But you know, Continuing Professional Development is a very important exercise in every learning institution. Because of retirements and other reasons, training should be a continuous process (Interview # 17).

At ZAOU, the information obtained from interviews, revealed that the institution had not yet put in place a staff development programme. One interviewee, a Dean, elaborated as follows on this issue:

Yes, I would like to comment from the beginning that there is no formal arrangement to train those with very little experience in the area of distance learning, but there are a number of conferences held within the region and elsewhere where the Vice Chancellor chooses to send so and so to go and meet colleagues and also to go and discuss a number of challenges facing

distance education mostly in the area of education delivery. So there is an attempt to help our colleagues with little or no experience in the area of distance education through these conferences and workshops (Interview # 15).

At the time of the interview, the *Zambian Open University* relied heavily on hired staff for lecturing during residential schools. However, the institution had its permanent staff, some of which were full-time lecturers and professors. There was an arrangement between ZAOU and UNZA, where UNZA lecturers would go to ZAOU to assist in the area of education delivery. ZAOU also hired qualified human resource from other institutions. They were paid an allowance per hour for the services they rendered to the institution (Interview # 12). This was confirmed during observations when the researcher found some UNZA lecturers at ZAOU campus.

At NISTCOL, the interviews revealed that the college had four distance teacher education programmes for training staff. The programmes had slightly different structures. For example, PTDDL was managed in conjunction with provincial colleges referred to as satellite colleges. The information obtained indicated that the College management had tried to train its staff in the area of distance education through workshops and short courses. Among the notable training mentioned by most of the interviewees, both managers and lecturers, was the course for distance education practitioners. One interviewee, the Principal of NISTCOL, had this to say:

I shouldn't say they have sufficient training but they have had some training; and this training has helped greatly in my view. The college has about twenty-eight lecturers who had undergone training in distance education. They did a one year certificate programme for distance education practitioners with UNISA. And this has helped greatly with the way we develop our distance education materials, monitoring instruments as well as assessment. I think they have the knowledge and skills. You know anything that is good can still be improved. So we still believe that even at this level we need to work harder and harder and improve so that we satisfy the needs of our students (Interview # 3).

Most of the lecturers at NISTCOL were trained as distance education practitioners. One of the interviewees said: "Fortunately NISTCOL is one of the colleges in the country which has lecturers who did a certificate course in distance learning. About 25 lecturers were trained in distance methodology by UNISA" (Interviewee # 1).

Lecturers at NISTCOL were able to develop modules that were considered to be suitable for distance students because of the training that they underwent. One interviewee from NISTCOL made the following comment:

Could I comment on that one? The modules are written in such a way that when a student is alone in a given locality, is able to read and interact with that material. The material is prepared in an interactive way. When the student is reading, [it] is like talking to the lecturer who prepared that material. The other thing is, in a number of modules there're activities for the students, so that the student is not just reproducing the material which is written but trying to think about the things which are being discussed in the module. Maybe what helps us to have such kind of modules is that eeeh, the Department of Distance Education has ensured that the members of staff write the materials according to the requirements of distance education materials. That has been possible because most of our lecturers have actually been trained in distance education (Interview # 2).

Training of staff is beneficial not only to the one being trained but also to the organisation. Orientation, for example, provides a staff member, existing or new, with an overview of the institution that offers distance teacher education programmes, its policies and procedures necessary to function efficiently in the new environment (see section 3.8.1).

The two colleges, NCE and COSETCO, at the time of this research were directed to stop offering STDDL until they had put in place certain logistics to provide student friendly modules (see sections 3.7.4 & 3.7.5). The interview with some members of staff revealed that the two colleges

were mounting training workshops in distance education for their members of staff (Interview #s 28 & 30).

During the time they were offering STDDL, from 1997 to 2008, the majority of the members of staff from NCE and COSETCO had had no formal training in distance teacher education. However, they had gained some experience on how to manage distance teacher education. This is evident from the following interview excerpt:

Although we've not formerly been trained, we're able to write instructional materials. However, given an opportunity to be trained, I think we would willingly accept that. We must move towards integrated methodologies. As my friend has said we should use various methods (Interview # 30).

Another interviewee at COSETCO had this to say concerning equipping lecturers with distance education skills:

In 1997, when we began distance education, we didn't do much in terms of student support services. That's what we want to do now. We've contacted people who have been doing distance education for a long time, like Zambia College for Distance Education which used to be called Correspondence College. So, we have already started, actually. We had some sessions with them some two weeks ago. They showed us how they do their lesson preparations. But we didn't do much in terms of student support services (Interview # 28).

It was considered important that a link was made between staff development and staff appraisal in relation to evaluating growth in an individual's performance through continuing professional development. Distance education practitioners were aware of the need to acquire skills in the area of distance teacher education (Interview # 29).

Question 7: How are the instructional materials prepared and how suitable are they for distance students?

Answer: The answers to the above question were similar to a large degree. Interviewees said that instructional materials were either prepared by individual lecturers or groups of lecturers. Some instructional materials were not suitable for distance students (Interview # 16). At the time of this research, UNZA was mobilizing its staff to write modules as opposed to the batches that they were giving their distance students (Interview # 15).

The information obtained through interviews, indicated that there was a lot to be done in order to improve distance education mode at UNZA. Students were unable to complete their teacher education programmes because lecturers had not written third and fourth year courses (Interview # 13). The instructional materials for first and second year courses were still offered in batches. Therefore, there was a need to implement the plans of writing modules.

The Zambian Open University had modules in some courses. The modules were described to be suitable for distance students. However, they were not really interactive because in some cases students complained that they could hardly understand the contents. For instance, a fourth year student complained that some modules were difficult to understand (Interview # 20). A part-time lecturer elaborated as follows:

Some of the modules are being prepared now! This means that students are registered before the development of the modules. For example, students were registered for Geography, Guidance and Counseling without study materials in these subjects. The number of centre managers is still small. Some provinces do not have centre managers. It should also be noted that some places are too remote. Students find it difficult even to reach these provincial centres (Interview # 23).

At the time this study was being conducted, NISTCOL had produced modules for PTDDL and DEM. Students in those two courses were given modules that were suitable for them (Interview # 1). The college had a challenge to develop modules for STDDL students. However, the

college had started writing modules for STDDL. A student interviewee confirmed that STDDL materials should be improved like that of PTDDL (Interview # 5).

Question 8: What challenges do you encounter in managing distance teacher education?

Answer: Interviewees including students mentioned a number of challenges. Among them were lack of national policy to guide the activities of distance education, lack of sponsorship for students who study through distance education, inadequate staffing, non integration of ICT in distance education delivery, late submission of assignments, lack of interactive study materials, inadequate physical infrastructure, inadequate library resources, poor record management and lack of continuing professional development programmes (Interview #s 2, 4, 16, 20, 25 & 29). Most of these challenges were common in all the institutions that were the focus of this study.

At the time of the interview, the *Directorate of Distance Education* at the *University of Zambia* was responsible for the general administration of distance education at the university. The academic staff came from the other departments of the university. This was a challenge because it was difficult for the Directorate to supervise the lecturer. In this regard, one interviewee, the Director of the *Directorate of Distance Education* at UNZA, had this to say:

...What we're doing is to coordinate distance education programmes. The teaching staff come from other units. What I'm trying to say is that this is a dual mode institution, so lecturers know that when they are employed as lecturers they are expected to teach both full-time and distance students, but this is a challenge because the same lecturers have other responsibilities in the units where they belong. However, in the current proposal where we shall no longer be a Directorate but an Institute of Distance Education, there is a provision to employ our own lecturers (Interview # 13).

The information obtained through interviews, indicated that the *Zambian Open University* through the schools and committees administered, organized and coordinated all distance education programmes. The *School of Education* enrolled students, kept students' records, printed and distributed instructional materials. The school, in conjunction with the academic

office, arranged the examination centres. All tuition and examinations regarding distance teacher education programmes were the responsibility of the *School of Education* (Interview # 24). One of the problems faced by ZAOU was limited full-time staff as one interviewee indicated:

A smaller segment of lecturers are full-time; they hold key positions in the departments, but many are part-time lecturers, and I think that is one of the challenges we need to address because these part-time lecturers sometimes are not as dedicated as they should be or they are too committed with their own responsibilities (Interview # 17).

The two colleges, namely NCE and COSETCO, had *Directorates of Distance Education*. Each of the *Directorates of Distance Education* in conjunction with the college administration was responsible for the administration, organization and coordination of the STDDL. The *Directorate of Distance Education* enrolled students, kept students' records, printed and distributed study materials. It also arranged contact sessions, provided counseling and support services in conjunction with relevant departments in the college. All tuition and examinations were the responsibility of the *Directorates of Distance Education* in conjunction with the college administration. One interviewee, the Principal of NCE, had this to say: "The committee was also responsible for monitoring all students, and administration of tests and examinations. Generally, the committee worked closely with the College management to ensure the smooth running of the programme". However, the shortage of academic staff in some departments made it difficult to manage distance teacher education effectively (Interview # 29).

At NISTCOL, the *Distance Education Coordinating Committee* fell directly under the *Department of Distance Education* (Interview # 1). Although the Distance *Education Coordinating Committee* was under the *Department of Distance Education*, it was mainly in charge of the STDDL. The committee was almost at the same level as the *Department of Distance Education*. This was a problem because the *Department of Distance Education* did not seem to have direct control of the activities of the *Distance Education Coordinating Committee*. The other challenge was that NISTCOL did not have modules for STDDL programme (Interview # 5).

The issue of a lack of national distance education policy was commented on by all the institutions. There was need for the national distance education policy to guide the activities of distance education in Zambia to avoid undesirable situations where, for example, two sections in the same institution deal with distance education programmes as was the case of NISTCOL which had *Department of Distance Education* as well as a *Distance Education Coordinating Committee* (Interview #s 2, 3, 13, 16, 26, 29 & 32).

The issue of late submission of assignments at all studied distance education institutions became evident in this study. Some students submitted their assignments late for marking due to lack of reference materials. Sometimes assignments would reach students when it was almost time to submit the assignment for marking. This resulted in students not benefiting from the comments of the lecturers. One lecturer interviewee at UNZA acknowledged that "[w]e don't have the facilities where students can log in to access the materials and do their assignments. So, those are some of the areas we're looking at this year" (Interview # 12).

At ZAOU assignments were given to students through the centre managers and during residential schools. The marked assignments contained comments to assist students in their studies. The interviews conducted with both staff and students from ZAOU revealed that assignments were a great concern to many people involved in the education delivery. The major problem that lecturers had was the delay in the submission of assignments for marking. On the other hand, some students complained that assignments arrived back late. This undesirable situation was similar to all the institutions that the researcher focused on.

As regards examinations, it came to the attention of the researcher that some students received their modules in some cases as late as two weeks before the examination. A concerned part-time lecturer at ZAOU explained as follows:

Sometimes shortages in printing cause the problem of some students receiving their modules later. In some cases, students receive modules even two weeks before examinations. Students use the initiative of photocopying from their senior students. Some modules in some subjects are not prepared in time. There're also problems of not meeting deadlines - some students

even send assignments after exams. The reasons for submitting assignments late include: late arrival of modules, no materials to refer to, health problems, family responsibilities and commitment at places of work. In the School of Education the Dean is flexible. He encourages lecturers/tutors to mark such assignments while in the School of Law they don't do that. Those which come a bit late are marked and some marks are subtracted or not marked at all if they are very late. The results are published late. In some cases, students go to the next academic year without knowing their results! Financial constraints also affect the smooth running of the programmes, and not all students pay in time. Additionally, some modules are not suitable for distance students,[there is a] lack of internet facilities and ineffective communication with part-time lecturers. For example, meetings are inadequate, and [there are] delays by the University to forward examination scripts and assignments for marking (Interview # 23).

The issue of late submission of assignments really impacted negatively on the management of distance teacher education in all the institutions that the researcher dealt with. The major reason was that distance education practitioners did not take advantage of the new education technologies. For example, all students in Zambia had access to a mobile phone, which meant that they could receive their assignment instructions through phones and almost at the same time (Interview #s 2, 16, 20, 28 & 29).

Question 9: In your view, how can management of distance teacher education in Zambia be improved?

Answer: There was general agreement in the responses given by both students and lecturers from all distance education institutions in Zambia concerning worrying issues about the management of distance teacher education in Zambia. Students as well as lecturers and senior education managers often gave similar suggestions that would make distance education institutions effective and efficient.

The interviews conducted with students, lecturers and education managers, and reflections revealed ways of improving the management of distance teacher education in Zambia. As a result of the challenges encountered in managing distance teacher education, the interviewees made suggestions for improvement. It should be noted that most of the suggestions that lecturers and education managers gave were in line with those suggested by students. According to the researcher the suggestions if implemented properly could help alleviate the challenges distance education practitioners face in Zambia.

• Communication skills

Distance education practitioners and students needed communication skills. In order for students to produce accepted academic work, they need good writing skills. One lecturer interviewee commented: "What I want to say is that it takes time for students to improve on the quality of their work. ... So, I wish there was a compulsory course for communication skills because it could make students to be more competent in their work" (Interview # 1).

The research revealed that although the general performance of distance students was all right, they faced challenges in writing assignments. One interviewee from UNZA had this to say:

On average, full-time students do better than distance students. In some cases, one or two students would get very high marks. Full-time students have certain facilities that distance students don't have; facilities such as the library. We also teach them throughout the semester" (Interview # 10).

The above statement showed that there was a lot to be done to help distance students learn properly. There was need to provide various support services to distance students. Without good support services, the quality of education would be compromised.

• *Marking and returning of assignments and quality of examinations*

Assignments were considered to be an important aspect of distance education. Lecturers were therefore expected to set assignments of high quality. They were also expected to mark and return them to students in time. Similarly, lecturers were expected to set good examination questions that would require candidates to apply the various skills they had learnt in the course.

As stated, interviews and reflections indicated that there were challenges associated with assignments and examinations. One interviewee made the following suggestions:

I still insist on the type of assignments that we set. We need to improve in the sense that we should set the assignments in such a way that the student can effectively do the assignment. It should be set in such a way that the student can do it effectively when he or she is in his or her station.

The other one is something to do with the marking of assignments. The comments that we write in the assignments should be building comments. I think the feedback must be given in a given time. It shouldn't take too long (Interview # 2).

The challenges associated with assignments were common in all the institutions that the researcher focused on. The major problems associated with assignments were late submission of assignments. This resulted in returning the marked assignments to students late or not returning them to students at all. This also affected the value and standard of the feedback to students. A student interviewee from ZAOU said that in most cases they had been handing in assignments even a week later than the due date (Interview # 20). The explanation for late submission of assignments to lecturers was that the assignments either reached them late or they had no appropriate reference books. In that regard, one student interviewee from UNZA made the following remarks: "You know, assignments can take a month or two to reach some students. By the time the assignment reaches we would only remain with very few days to write and submit it" (Interview # 18).

• Records management

Distance education requires good record management. Unfortunately, the interviews with students and distance education practitioners from all distance education institutions studied except UNZA revealed that there was a challenge in relation to record management. One participant made the following suggestion in relation to records management: "For me, looking at the situation of the current DEM we should improve on record keeping. Students have been telling us that we've lost the assignments, and we don't know whether they actually submitted or not. I think there is a need to keep good records of the date assignments are received and that of marked assignments" (Interview # 2).

• Inadequate reference materials

Most of the interviewees complained of lack of reference books in the libraries and resource centres. For instance, one interviewee complained that:

We've the library, but my experience with the library is that most of the books are outdated. It's rare that you find books that were written in the nineties or in the two thousand. Most of our libraries, even if I were to go to the University of Zambia library, most of the books are outdated. And then the money that we get is not enough to buy the recommended books for example, in the Book World (Interview #7).

Distance students could not write and submit their assignments because of inadequate reference materials. Arising from this challenge, the following suggestions were made:

- (a) Zambia library service should be linking up with the colleges of education so that they know the courses that are offered through distance so that they equip the libraries with appropriate books.
- (b) Students should be encouraged to do their assignments while they are attending their residential schools. During this time students will be able to use the library resources.

According to interviewees, Zambia had the institutions that could alleviate the problem of reference materials if they were equipped with appropriate books. They were of the opinion that if the provincial, district and zonal teachers' resource centres were stocked with appropriate books, distance students would have the books that they wanted.

• Instructional materials

Distance education materials were considered by the interviewees important in bridging the gap that existed between the student and the institution that offered distance education programmes. The instructional materials required appropriate print size, language, layout, and so on. The modules should be interactive. So, interviewees indicated that lecturers should write the modules in groups so that they conform to the standards of distance education materials. One interviewee noted that "Distance education practitioners should produce materials that can easily be understood, especially where difficult topics are concerned" (Interview # 18).

• Distance education policy

Distance education policy was regarded as important by, especially the lecturers and education managers. They were of the opinion that the national policy on distance education would guide the activities of distance education in learning institutions. The national policy on distance education had not been finalised at the time of this study. In this regard, some interviewees said: "I know we've the *Directorate of Open and Distance Education*, but we would like the national policy on distance education to be sold to all would be students, to all institutions of learning ... so that distance education is not only limited to teacher training ... The idea is to embrace distance education in our education system and appreciate its product as much as we would appreciate those who are on face-to-face programmes" (Interview #s 3, 16, 29 & 32).

• Enrollment

There were different views regarding over-enrollment in the institutions that the researcher focused on, particularly in the colleges of education. There were interviewees who felt that there

was a need to reduce the number of students studying by distance mode in the institutions that offered distance teacher education courses/programmes, the reason being that the available physical facilities could not cater for such large numbers (Interview # 4). Other interviewees advocated for improved student support services, such as putting instructional materials online so that students could access them wherever they were (Interview # 4). They argued that distance education did not necessarily compel students to be on campus. Additionally, they said that many teachers wanted to improve on their academic and professional qualifications and limiting the number would disadvantage them.

• Information communication technology

Information communication technology, as already been alluded to, was considered vital in the management of distance teacher education (see section 3.9.3). The information obtained from interviewees indicated that ICT could improve distance education delivery. Many interviewees suggested that distance education institutions could have websites where students could access course materials like modules (Interview #s 2, 12, 16, 20, 24 & 29). One interviewee at UNZA noted that students should have an opportunity to communicate directly with the lecturers. The ICT should also be improved to facilitate effective communication. In this regard, lecturers would be able to communicate and e-mail assignments to their students (Interview # 10).

At the time of this study, the *University of Zambia* was intending to employ an ICT expert as a way of integrating ICT in distance education delivery. The initiative would be extended to provincial centres. The *University of Zambia* also intended to introduce e-learning (Interview # 13). The researcher noted that the idea of integrating ICT in education delivery was regarded as a priority for all the institutions that the research had focused on.

• Residential schools

Residential schools or contact sessions were considered by all the 67 interviewees to be very important due to inadequate appropriate materials for distance students. During residential schools, lecturers explained to the students the concepts that they could not understand when

they were reading on their own. The suggestion that was made regarding residential schools was to extend the period for the contact sessions (Interview # 4 & 6). According to students, the extension of residential schools would enable students and lecturers cover many difficult areas, and students would also have sufficient time to use library facilities. However, some interviewees felt the period for residential schools was sufficient (Interview # 6). Students and lecturers also suggested that residential schools should be decentralized by establishing centres, or simply using the existing teachers' resource centres, where students would meet their lecturers and fellow students. The centres would also be used as examination centres (Interview #s 23 & 24).

• Staff training and development

Staff training and development was identified as being very important both to the individual and to the organization (see section 3.8.1). Most lecturer and education manager interviewees indicated that distance education staff should be trained. Capacity building of distance education practitioners should not be an ad hoc thing (Interview #s 16 & 29). The suggestion made by interviewees concerning continuing professional development in all the institutions that the researcher visited is revealed in this statement:

The lecturers are ill-prepared both in designing and developing distance learning materials. There has been no formal training. The two days workshops are not meaningful at all. Talking about distance education material like that done by the Commonwealth of Learning, there's a certain way of how to do it. Lecturers do not have sufficient skills to design and develop modules. Second, we must be trained in how to deliver during face-to-face sessions because they are not normal sessions. But the biggest challenge that we've, is that of our lecturers who go to lecture with no zeal [energy] at all. As you know the University does not employ to replace those who have left the University. At the moment there's no class with less than 75 students. So where do the few lecturers find time for distance education students? As a result we're not even strict the way we mark assignments.

We say these are distance students, so we treat them differently. This calibre of students is questionable (Interview # 16).

It should also be noted from the statement above that there was a shortage of staff at UNZA. Shortage of staff was common in all the five institutions (see sections 3.7.1, 3.7.2, 3.7.3, 3.7.4 & 3.7.5). The suggestion that most education manager, lecturer and student interviewees made was that there was a need for improving staffing levels by employing more qualified and experienced personnel, and have a continuing professional development programme (also see section (3.8).

5.2.2 Findings from observations

The researcher visited all the five institutions that offered distance teacher education programmes. However, he or she only managed to observe distance education activities at UNZA, ZAOU and NISTCOL. As already been explained, at the time of this research NCE and COSETCO had been directed to stop offering distance education programmes until they had put in place student support services (see sections 3.7.4 & 3.7.5).

5.2.2.1 UNZA observation done on 18/03/09 for 3 hours

(a) Printing room

The three clerical officers were busy with what seemed to be their routine work of arranging pages of the print materials, and finally stapling them into batches (course materials written in form of detailed notes). The machine operator was also busy running materials using two big photocopiers. The photocopiers were in good condition although the machine operator said they could once in a while break down and could be repaired or simply serviced.

The Assistant Registrar and Administrative Officer were seen from time to time checking on the work the machine operator and clerical officers were doing. The printing room (section) housed the Financial Officer who seemed not to be having clients (distance students). However, there

were only two students that the researcher saw entering the office. Below are the pictures of School of Education administration block and a printing room showing some study material. The researcher was granted permission to take photographs by the *Directorate of Distance Education*.



University of Zambia - School of Education



A section of the printing room

The researcher noted that the number of students at UNZA had increased to 2,034 students (see table 3.4). During the interview with the Director of DDE at that time, it was also noted that the number of distance students had increased over time (Interview # 13). It was therefore important

to have all the clerical officers required by the *Directorate of Distance Education* who would ensure that materials are printed as quickly as possible (also see 5.2.1).

(b) Registry

At the time of this research, the Senior Administrative Officer who was also Acting Assistant Registrar was in-charge of the registry. She was busy finalizing the budget for the DDE. In the registry, the routine work was executed. Students from different parts of the country were 'flocking in' mainly submitting their assignments. A few prospective clients were those who were asking for information regarding distance education programmes.

(c) Computer room

In the computer room there were three stenographers whose job was typesetting all the materials taken to them by the lecturers. They were also charged with the responsibility of typing correspondences and forms and any other items which needed to be typed. All the employees in the computer room were women.

The number of employees needed in the computer room was five but there were only three employees. Because of understaffing, there was too much work for the few employees. The available employees could not easily go on leave (also see section 5.2.1).

(d) Researcher's reflections

The *Directorate of Distance Education* at the *University of Zambia* was a well established Directorate with well-defined organization structure. However, if the work of organizing, administration and coordination were to be executed optimally, staffing should have been improved. For instance, the number of clerical officers should have been increased to six and the stenographers should have been five (also see sections 3.10 & 6.3.8).

The space (offices, printing room and registry) could be increased to create more space and ICT facilities needed to be improved to suit the modern way of teaching distance students as well as for communication purposes (see section 3.9.3). It would also have been a good idea if UNZA worked closely with local radio stations to disseminate information regarding distance education to students. The idea of making DDE an institute of distance education (see section 5.2) was plausible because the institution would then be autonomous, thus improving its performance. The offices of the resident tutors should have been empowered to render meaningful support services to students. Students seemed to lack support from resident tutors. If any, there was very little support indeed.

On the day of observation, the Director, and Coordinator for student support services who was also acting as Coordinator for Course Materials had visitors from the SADC and *Ministry of Education*. They had a discussion about Open and Distance Learning. The management looked busy, especially with meetings. It was even difficult for the researcher to find time to interview the Director. Some other time was to be made to obtain the Director's opinions regarding management of distance teacher education at the *University of Zambia*.

The *University of Zambia* should seriously consider offering distance programmes wholly by distance. Some of the distance students who visited the University on that day were from remote places of Zambia and needed to complete their teacher education programme through distance education.

5.2.2.2 NISTCOL observation done on 22/04/09 for 2 hours

(a) Resource centre

NISTCOL had a resource centre which was a section of the *Distance Education Department*. It was a place where instructional materials were printed and stored materials awaiting distribution to students in the 9 provinces of Zambia (also see section 3.8.4). The resource centre also had computers and internet facilities. Lecturers were observed preparing their work in the resource centre.

Generally, the resource centre was well equipped with various pieces of equipment used to produce instructional materials. However, it lacked equipment that would enable lecturers produce instructional materials in bulk. At the time of the observation, there were four workers who were photocopying and stapling test papers for DEM students. There were also lecturers and support staff from other departments who were using the facilities of the resource centre.

(b) Human resources

In terms of staff, the *Distance Education Department* had a Head of Department and Head of Section. The two members of staff and one worker employed by the college could not cope with the work in the department (see section 3.8).

(c) Face-to-face contacts

This observation took place at the time when DEM students were on campus for two weeks. Students were seen in small groups studying. They were discussing topics in the modules written by lecturers. Below are pictures of the NISTCOL administration block, DEM students and a sample of modules. The researcher was granted permission to take photos by the college management. Students also allowed the researcher to photograph them.



NISTCOL administration block



A study group of DEM students

DEM students in an examination room



DEM – module 7 Curriculum Development

(d) Researcher's reflections

Considering the amount of work that was seen in the *Distance Education Department*, it was advisable to increase the number of staff, both academic and administrative staff. Nevertheless, it was observed that NISTCOL was well established in terms of how to manage distance teacher education (see sections 3.6 & 3.7.3).

5.2.2.3 ZAOU observation done on 27/04/09 for 4 hours

The researcher visited Elizabeth campus and the ZAOU headquarters. He spent two hours at each of the places mentioned (also see section 3.7.2).

(a) ZAOU headquarters

At ZAOU headquarters, the researcher made the following observations:

At the reception the researcher observed the receptionist receiving visitors. The majority of visitors were students with queries related to their studies. Among the students interviewed were those who were handing in their assignments for marking.

There were no internet facilities where students could access information that they needed (see section 3.9.3). Most of the study materials were provided in modules which were not available on the ZAOU website (see section 3.8.4). However, there was a plan in place to put the modules on ZAOU website. The University was in the process of establishing internet cafes in all the nine provinces of the country.

(b) Elizabeth campus

At *Villa Elizabeth Campus* in Lusaka the researcher observed that there were not sufficient offices for all members of staff. All the schools except the *School of Education*, which was housed at Chadeleigh near *Munali Boys High School*, were at Elizabeth campus. Some academic staff were seen operating in one room (see section 3.8). However, there were plans to construct more offices at the ZAOU headquarters.

(c) Researcher's reflections

Considering the fact that ZAOU was only approximately five years old, there was nevertheless evidence that the institution would become an internationally recognized Open University providing quality education through distance learning. The instructional materials were quite interactive (see sections 3.8.4 & 5.2.1). However, there was a need for the University to improve student support services.

5.2.3 Analysis of relevant documents

The literature review (see section 3.3) indicated that the most important factor in the development of distance education was its advantage over the traditional school system. Distance education was widely accepted as a method of providing education to the public either as a complement to conventional education or as an independent method of education delivery.

The batches that the researcher had access to (see section 5.2.1) were not suitable for distance students because they lacked the criteria of interactive language, layout, and suitable activities required by distance education course materials. Since the researcher relates quality distance education instructional materials to continuing professional development, well-trained distance education practitioners would be in a better position to develop suitable materials for distance students.

However, an analysis of the modules that were produced by NISTCOL revealed that they were more interactive than those produced by UNZA or ZAOU. The modules were generally suitable for distance students. A student, who was alone in a given locality, would be able to read and interact with that material. One lecturer interviewee at NISTCOL had this to say concerning study materials: "When the student is reading he or she is like talking to the lecturer who prepared that material" (Interview # 1). However, some students at NISTCOL indicated that some modules were of low quality and needed to be improved upon (Interview # 6). NISTCOL only had handouts for STDDL. They were not suitable for distance students because they did not meet distance education criteria (see section 5.2.1).

An analysis of the instructional materials at both NCE and COSETCO revealed that the handouts were not suitable for distance students. They were batches similar to the ones that the *University of Zambia* offered its students. Since the lecturers were not trained in distance education methodology (see section 5.2.1) it was difficult for them to develop appropriate distance education instructional materials.

An analysis of the relevant documents also revealed that the *Ministry of Education* was asked to provide internet facilities at all district teachers' resource centres. This would enable distance students access information from colleges and be able to communicate with their lecturers. The government, through the *Zambia Library Service*, was also asked to establish at least a library in each district. This would help students to access more information within their local environment (see section 3.8).

5.3 Summary

The findings from the interviews, observations and relevant documents, such as modules and official correspondences, indicated that distance education practitioners still had some work to do concerning the management of distance teacher education in Zambia. The training needs of distance educators, especially those related to the integration of ICT in distance education delivery, interactive instructional materials, student support services and the lack of a national policy on distance education in Zambia seem problematic.

The information from interviews with students, lecturers, heads of institutions and senior education officers from the *Ministry of Education* revealed a number of issues concerning the management of distance teacher education in Zambia, for example, late submission of assignments due to inadequate library resources and non-interactive instructional materials which, in some cases, were supplied to students late. The findings were similar to those obtained through observations. The findings were also congruent to information discussed in the literature review in the sense that aspects considered to be important in the management of distance education in literature were also considered important by the interviewees. For instance, training

and continuing professional development of distance education practitioners (see section 3.8) was considered very important by the interviewees since it provides skills to manage the various aspects of distance teacher education in Zambia.

In the next chapter, the researcher will discuss the themes that emerged from the findings.

CHAPTER 6

DISCUSSION OF THEMES THAT EMERGED FROM FINDINGS

6.1 Introduction

This study primarily sought to establish the strengths and weaknesses of the various aspects of the management of distance teacher education in Zambia in the context of the research questions and objectives (see sections 1.7 & 1.8). The chapter discusses the themes that emerged from the findings of the study as presented and discussed in chapter 5.

In order that meaningful conclusions may be reached, the themes that emerged from the study are examined in the light of the theoretical and methodological lenses discussed in chapters 2, 3 and 4 in relation to the objectives of the study as a means of answering the research questions.

The themes concerning the strengths of management of distance teacher education in Zambia were: a recognition by providers and clients of the importance of distance education, an awareness of the challenges of distance education as displayed in their guidelines and a positive attitude towards distance education. The themes concerning the weaknesses that emerged from the study were: inadequate student support services, inadequate channels of communication, inadequate training and professional development, problems relating to integrating information and communication technology in distance education delivery, problems concerning assignments and examinations, inadequate records management, inadequacy regarding interactive instructional materials, problems relating to staffing, and a lack of national policy on distance education in Zambia. The discussion about these themes is substantiated with the quotes from interviews, and collaborated and interwoven with existing literature and theoretical frameworks discussed earlier.

6.2 Themes concerning the strengths

The themes concerning the strengths of management of distance teacher education in Zambia that emerged from the findings of this study are discussed below.

6.2.1 A recognition by providers and clients of the importance of distance teacher education

A recognition by providers and clients of the importance of distance teacher education was one of the themes concerning the strengths of distance teacher education in Zambia. All the interviewees at the five distance teacher education institutions that the researcher visited acknowledged the importance of training teachers through distance education mode (Interview #s 1, 3, 11, 16, 25, 28 & 29). The main reason was that traditional institutions have limited places for all those who want to learn (Interview # 20).

A realisation by the providers and clients of distance teacher education that distance teacher education is as important as the traditional way of education delivery means that people value the role of distance teacher education. The literature review indicated that there is vast and rapid growth of distance learning at all levels of education to the extent that it moves from being a marginal mode of education delivery to becoming an integral part of the overall educational and training provision. This means that a significant number of people in the world today receive their education through distance education (see section 3.3). A recognition by providers and clients of the importance of distance education in Zambia is a step in the right direction.

6.2.2 An awareness of the challenges of distance teacher education

One of the themes concerning the strengths of the distance education was the awareness of the challenges affecting distance education, particularly the management of distance teacher education in Zambia. Education managers, lecturers and students in all the five distance teacher education institutions that the researcher visited were aware of the problems that distance education practitioners and students were facing (Interview #s 4, 16 & 20).

Distance education was seen to be a methodology of education delivery that was innovative in nature. It relaxed entry qualifications, used specially designed learning materials and modern educational technologies. It also provided student support services, and applied advanced method of evaluation (Interview #s 10, 11, 15, 16, 17 & 25). If students were not fully aware of the system before joining, they might find themselves in an unfamiliar situation. Therefore, there was need to ensure that distance students were aware that distance education was different from conventional method of education delivery. Distance learning requires students to be independent but at the same time interact with their peers and tutors.

This study revealed a number of challenges of which inadequate student support services, inadequate channels of communication, problems related to assignments and examinations, and a lack of national education policy to guide the activities of ODL (see section 6.1) were a few. When people are aware of the challenges hindering the smooth management of distance teacher education, it becomes easier to find solutions to overcome them (Interview #s 12, 13 & 27).

6.2.3 A positive attitude towards distance teacher education

Another theme pertaining to the strengths of distance education in Zambia was the fact that the majority of the Zambian people, especially the clients who are the teachers at various levels of education delivery, have a positive attitude towards distance education. This was seen in the large numbers of teachers who registered for further studies through distance education mode in the five institutions that were under investigation (see sections 3.7.1, 3.7.2, 3.7.3, 3.7.4 & 3.7.5). As mentioned in section 6.2.1, education manager, lecturer and student interviewees revealed that there was a demand for distance education (Interview #s 4, 6, 15 & 20).

Although a positive attitude was generally displayed by education managers, lecturers and students, some lecturer interviewees nevertheless displayed negativity when talking about distance education (Interview #s 10 & 11). A positive attitude towards distance education is good because distance education practitioners would be assisted by many people who feel that distance education is as good as conventional method of education delivery. This is in agreement with the concept of the theory of equivalency which states that education at a distance should be

built on the concept of equivalency of learning experiences (see section 2.5). Therefore, it is desirable for people to have a positive attitude towards distance education in general and distance teacher education in particular.

6.3 Themes concerning the weaknesses

It should be noted that some of the five distance education institutions that consisted of this collective case study have strengths in certain aspects and weaknesses in others. It is important to highlight the weaknesses encountered in managing distance teacher education in Zambia because the knowledge of the weaknesses would assist not only policy-makers and distance education practitioners but also students. For example, when students are aware of the problems relating to instructional materials, they would take measures to try to overcome the difficulties being faced.

6.3.1 Inadequate student support services

A lack of adequate student support services is one of the themes that emerged from the findings of this study. As indicated in the literature review, the development and maintenance of student support services is of vital importance in distance education (see section 3.10). The importance, and perhaps indispensability of student support services, lies in the fact that high completion or graduation rates are positively related to the provision of effective counseling and support to distance students (see section 2.2). Distance education institutions are supposed to have a student support model with well-defined functions and activities at the institutions and other study centres. The support services must include administrative and academic services, and other services that might be required. Administrative support services range from publicizing distance education programmes to maintaining all types of data for students. Academic support services include orientation of students, personal support, provision of library facilities, and tutoring and motivating students to continue with their studies (see section 2.2).

The findings show that support services in the form of academic and administrative support were mostly offered at the institutions but that there was little in terms of support rendered to students

at the regions where students were found. For instance, NISTCOL did not use local institutions like provincial or district teachers' resource centres for supporting students who were pursuing a secondary teachers' diploma (Interview # 5) and the *University of Zambia* despite its having provincial centres, did not offer the support that students needed. One distance student at UNZA said, "In our provinces we've resident tutors but in these places there isn't much information" (Interview # 18).

Although the support services at the *University of Zambia*, the *Zambian Open University*, the *National In-service Teachers' College*, the *Nkrumah College of Education* and the *Copperbelt College of Education* included provision of instructional materials, use of cell phones, library facilities and face-to-face contacts, there was limited interaction between students and lecturers in these institutions. That was mainly due to the students' limited access to internet facilities. However, a few students at NISTCOL and UNZA found it easy to communicate and research through internet. Interaction between students and lecturers took place mainly through mobile phones which most of the students found most reliable. At the time of the interviews, all districts in Zambia had mobile phone networks. The interaction between students and lecturers would have been more effective if the institutions had improved on the information communication technology. For example, institutions could take advantage of mobile phone networks which are available in Zambia not only to talk to students but also to use the facility to improve teaching and learning by sending assignments and reminders to all students almost exactly at the same time.

Yet, it has to be borne in mind that not all students were unhappy with the support they received. Some student interviewees acknowledged the support services that they received when they said that they were happy with the support services they were receiving from their lecturers (Interview #s 5 & 22). One of the lecturer interviewees indicated that the support services created an environment that was conducive to distance learning, motivated distance students to continue with their studies, and encouraged socialization and team work and team spirit (Interview # 16).

6.3.1.1 Guidance and counseling

Of great importance was that the majority of the distance students who participated in this study were satisfied with the academic guidance or counseling provided by the staff in the form of tuitions during face-to-face contacts, motivational talks and guidelines regarding studying through distance education. The lecturers expressed similar sentiments although there were some who felt that they were given insufficient guidance since distance teacher education in Zambia was not given a priority like the traditional method of training teachers. As advised by one of the lecturer interviewees who was of the opinion that pre-service and in-service teacher education could be done through distance education what was truly needed was the government's support of distance teacher education programmes (Interview # 28).

6.3.1.2 Library services

It was evident from the information gathered from personnel and students as well as from observations that the library services in the institutions that offered distance teacher education programmes were very unsatisfactory. Most of the students derived little satisfaction from the services provided by their institutions, mainly because of the shortage of books and the outdated information regarding the specific areas of their study. Some student interviewees had this to say: "...most of the books that they indicate in the references cannot be found; sometimes they would advise us to use internet facilities; for some of us it is very difficult to find those facilities" (Interview # 4, 20 & 21).

Distance education practitioners should therefore consider integrating ICT in distance teacher education (see sections 3.2 & 5.2.1). Through ICT, distance students would be helped to master 21st century skills such as thinking, communicating, collaborating, problem-solving, information skills and self-direction (see section 3.8.5).

6.3.1.3 Face-to-face sessions

There was a universal agreement among distance education practitioners from the five distance education institutions studied in terms of teacher education regarding the necessity of oral or face-to-face tuition in distance education (Interview #s 4, 6, 11 & 25). The need for face-to-face contacts resulted from inadequate support services provided by institutions offering distance teacher education programmes (Interview # 3). The majority of the interviewees were of the view that face-to-face tuition was essential because it served as an opportunity for lecturers to explain to students difficult concepts that they did not interpret successfully on their own: "During the contact session lecturers hear their successes and challenges and explain to the students difficult concepts" (Interview #s 1 & 13). A lot of information was given during this period. However, it would have been desirable if the institutions that offered distance teacher education programmes improved ICT connectivity (see section 3.8.5).

One student interviewee from NISTCOL explained that students attended contact sessions in order to be given study materials and for lecturers to explain the areas that students found difficult when studying alone (Interview # 1). Ten student interviewees from NISTCOL were of the opinion that the period for face-to-face tuition could be made longer. For example, one interviewee lamented as follows:

The period of two weeks is not enough ... because we leave certain things hanging. And when we get back we also carry some material which we should work on. So, I feel if they can extend the period, instead of two if they can extend to three weeks, to cover up (Interview # 6).

However, a lecturer interviewee from UNZA had the following contrary opinion:

I think it's not the length of period that they [the students] stay here that matters, because if you understand distance learning that contact period is not meant to teach A-Z; [it] provides them with an opportunity to

interact with their lecturers. And during that interaction the lecturers are really supposed to concentrate on addressing problem areas in each course and equipping the learners with study skills and how they can solve the problems when they are studying on their own (Interview # 13).

The face-to-face contacts were the most favoured and valued student support tool that the interviewees mentioned (see section 5.2.1) despite the fact that some students, lecturers and education managers felt that face-to-face contacts did not materialize sufficiently (Interview #s 6, 12, 16, 19, 23 & 29). During face-to-face contacts students were able to share challenges that they encountered with their colleagues and felt that they were part of the institutions that offered the programmes they were pursuing. The face-to-face contacts were valued by students in terms of providing them with an opportunity to use and borrow books from the libraries of the institutions. On the basis of the benefits derived from the face-to-face contacts by the students, lecturers felt that they should continue to be an integral part of distance education.

6.3.2 Inadequate use of channels of communication

Distance education has gained momentum with the advent of innovative technologies. Today's technologies have created the possibility of the classroom being brought to students' homes or workplaces. High quality education can be imparted to a large number of students across the country (see sections 3.8.1 & 3.8.5).

While distances are bridged faster than ever before, the challenge of providing a seamless learning experiences over different geographical locations is now possible through technologies like video conferencing, video teleteaching, and web casting, amongst others (see sections 3.8.1 & 3.8.5).

Communication as noted by interviewees was extremely important in distance education since some students never stepped foot on an institution's campus or did so infrequently. For many distance students, the primary contact with their lecturers was through the various channels of communication (Interview #s 13 & 25). In this regard, lecturers were institutional ambassadors:

Through advancements in technology (mobile phones and internet) lecturers at all institutions are enabled to communicate with students (Interview #s 1, 12, 14, 27, 28, 29 & 30).

Unlike full-time students, distance students needed to communicate with their lecturers from time to time, and with their fellow students for them to continue being on the programme. This study revealed that although communication between students and the institutions which offered distance teacher education programmes had improved tremendously, due to the availability of mobile phone providers in the country, for example *ZAIN Mobile Provider* which is present in all the districts of Zambia, there were still some remote areas of some districts which did not have a mobile phone network (see section 3.8.5).

The communication that was done through mobile phones was primarily for conveying messages like giving students the date for face-to-face session. Unfortunately, mobile phones were not used as a tool for teaching and learning process. Its use in this regard would improve the quality of teaching and learning in the distance teacher education institutions.

All the five institutions involved in this study indicated that they used the media such as newspapers, radios and television to communicate with their distance students as explained below:

In a few cases we've used print media, public and community radio, especially for making announcements. We've also used postal services to communicate with the students. Apart from phones, these have been the common means of communication. Of course, there has been a problem with those in remote areas, where mail takes long to reach them. We'd a few students who received their assignments too late (Interview # 14).

The means of communication between students and the institution obviously included the use of postal services, especially when study materials and letters were posted to students. Unfortunately the postal services were sometimes not reliable (see section 3.8.5).

Although communication can be considered to be a factor that impact positively on the management of distance teacher education in Zambia, the channels of communication are still not used optimally as can be seen from the discussion about the problem relating to ICT in section 6.3.1.2. Effective communication was a key to engaging, connecting, and retaining distance students.

6.3.3 Inadequate training and professional development

One of the strategies of improving the management of distance teacher education in Zambia that emerged from the findings was the provision of an efficient education and training system (also see 3.8.1). Such provision, for practitioners, theoreticians and the wide range of professionals in the field was considered to be very important (Interview #s 3 & 29). While Zambian distance education had witnessed a level of growth over the years, especially as a result of the work of the *University of Zambia* in distance education (see section 3.7.1) its early practices in human resource development revealed a general lack of a systematic education and training strategy for its practitioners (see section 3.8.1). This might have been due to the non-realisation that distance education was as good a mode of education delivery as the traditional system of education delivery. The theory of equivalency (see section 2.5) could therefore result in the widespread acceptance of distance education in Zambia. If lecturers, students, and the public in general identified learning at a distance as the equivalent of what they considered to be traditional learning, distance learning would become a mainstream mode of tuition (see section 2.5).

In order to function effectively as a professional, one must have continuing learning experiences to reinforce his or her initial education (see section 3.8.1). Training and continuing professional development, which was considered essential by students, lecturers and education managers who took part in this study, indicated the urgency and importance of training and continuing professional development for distance education educators (Interview #s 3, 16, 28, 29 & 31). In this regard, one of the lecturer interviewees from UNZA said that "lecturers should [have] sufficient training in the area of distance education so that [they can] support their students well" (Interview # 16).

In the two universities and three colleges of education at which the research was conducted, some initiatives of continuing professional training and development were noted by the researcher. For example, at NISTCOL, it was discovered that 23 members from a staff of 45 members had completed a one year certificate course for distance education practitioners with the *University of South Africa*. Three lecturers were doing the same programme at the time this study was being conducted (see section 3.7.3). The College Principal (see interview # 3) also indicated that lecturers had been trained in distance education methodology through in-house workshops. He also said that lecturers learnt distance education methodology by being involved in writing study materials for distance students. However, he explained that staff development was a continuous process because employees needed skills to deal with new issues.

Similarly at UNZA, continuing professional training and development was done mainly through workshops, seminars and conferences. Most of the interviewees appreciated this mode of training but were nevertheless of the opinion that the University could do a lot more in the area of continuing professional development (Interview #s 10, 11, 15, 16 & 17).

At ZAOU there was no staff training and professional development programmes at the time of this research. However, its Vice Chancellor had the prerogative of appointing some members of staff to attend conferences on pedagogical strategies in Open and Distance Learning that were taking place in the SADC region (Interview # 25). The university could have had its own staff development programme instead of depending solely on conferences, seminars and workshops organised by other institutions in the region. However, it was noted by the researcher that ZAOU was a new institution that would in a near future focus on the continuing professional development of its academic and administrative staff (Interview # 24).

Training can be seen as a formal, often short-term initiative, where an ODL institution attempts to increase an individual's skills and knowledge in order for him or her to perform a particular set of tasks with increased ability. In this study a need for all lecturers involved in distance education to be trained was highlighted by most of the distance education practitioners interviewed at the five distance teacher institutions (Interview #s 3, 15, 24, 28, 29 & 31). They

could be equipped with knowledge and skills that would enable them to function confidently and effectively as distance education practitioners. The primary objective of a staff development programme in distance education is to facilitate change by involving lecturers in CPD. This can only be done if an institution has a well thought out staff development programme for both academic and administrative staff (also see section 3.8.1).

Professional development in information communication technologies was also cited by participants as being very important in terms of training and professional development. Indeed, the quality of staff in ICT and its impact on the confidence and competence levels of distance students was one of the most important components in ensuring that ICT became, and continued to be, an integral part of the learning experience of distance students. The study revealed that although there were attempts to improve ICT in the learning institutions, there was still a lot to be done (Interview #s 3, 12, 24 & 26). ICT could enhance teaching and learning if ICT facilities were available.

6.3.4 Problems relating to the integration of information and communication technology in distance teacher education delivery

This section on the problems relating to the integration of ICT in distance teacher education delivery is offered independently although a previous section already focused on communication. It is discussed separately because ICT is vital in education delivery. It was considered important to discuss problems concerning integration of ICT in distance teacher education in detail.

The current and emerging communication technologies provide unique opportunities to continue the professional development of teachers and other educators. The Web provides teachers with incredibly rich instructional and information resources to enhance their instruction and professional skills (see section 3.9.3). Globally, education systems are faced with an increasing demand for alternative delivery modes of teaching and learning. As a way of improving distance education delivery, distance education practitioners in all five institutions could have used ICTs that were interactive, electronic and computer-based for distributing information and facilitating

communication between students and lecturers, and students and students (Interview #s 6, 10, 30, 31 & 32).

At the time of this study, Zambia had already developed an ICT policy framework although it was noted that the Ministries of Education, and Science, Technology and Vocational Training had not yet applied it to pave the way for the development of the ICT sector which could be beneficial for many purposes, including the development and enhancement of distance teacher education in the country. However, among the five institutions UNZA and NISTCOL had begun to use information communication technology, especially in records management. ICT could, however have been used to reach many distance students and to improve the communication system between students and the distance education practitioners (see section 3.8.5).

One of the findings of this study was that ICTs could improve interaction between students and institutions that offered distance teacher education programmes (see section 3.8.5). Hence, the need for institutions to have fully incorporated information communication technologies in distance teacher education in Zambia was clearly expressed (Interview #s 16, 22 & 23). In this way, students would have the opportunity to share their ideas and align themselves with the information presented to them by their lecturers. The incorporation of ICTs would, as indicated by a lecturer interviewee from UNZA, enable distance students access on-line resources such as books, journals and instructional material:

We've on the drawing board the plan to use ICT as a means to deliver materials to distance students as well as for use in the whole university. We also want to digitize the library so that some of our materials will be accessible in digital form to all students and researchers. That's in our strategic plan from 2008 to 2012 (Interview # 14).

Although some student interviewees did not encounter problems in communicating with their fellow students and tutors (Interview #s 2, 4 & 20), distance students and lecturers did not interact in the way they should have interacted. Distance students required on-line learning communities where they could interact not only with their colleagues but with their lecturers as

well (Interview #s10, 11 & 30). Online interaction can serve as an added facility to facilitate teaching and learning process of distance education. One lecturer interviewee said: "At the moment students don't interact with their lecturers online" (Interview # 12).

If distance education institutions had reliable websites where their students could access all information regarding their studies, including study materials, students would be more motivated and encouraged to study through distance education (see section 3.9). A student interviewee at NISTCOL said: "it would be a good idea if instructional materials were available online so that we could study at anytime aspects that are relating to our programmes" (Interview # 4).

The researcher is of the opinion that as long as ICT was not fully integrated into distance education there would still be a need for some face-to-face tuition. However, when ICT was optimally used as a teaching and learning tool in distance teacher education, there would be no need for face-to-face tuition except in isolated situations where a student, for example, wanted to talk to his or her supervisor about an issue related to his or her research. Distance education practitioners should therefore be equipped with computer skills in order to guide their students properly.

A lot is being talked about virtual classroom these days. The barrier of time and distance has been overcome by virtual classrooms and in many developed countries it has helped the teaching process and improved the students' learning curve where distance education is used as a method of education delivery (see sections 3.4.4 & 3.8.5). However, this study has revealed that there was still a lot to be done concerning open and distance learning in Zambia in terms of online teaching. At the time of this study, rural distance students were disadvantaged, especially in terms of using computers (Interview #s 18 & 19).

6.3.5 Problems concerning assignments and examinations

Issues pertaining to assignments revealed themselves clearly during this study (see section 3.9). There were a number of complaints regarding the delivering of assignments and feedback (Interview #s 5, 6, 19, 21 & 23). Since distance education practitioners regarded written

assignments for submission as an important element in a distance education, assignments for submission held a central place in the institutions under discussion. The importance of written assignments for submission as part of the delivery system at UNZA, ZAOU, NISTCOL, NCE and COSETCO was evidenced by the fact that they comprised integral parts of the learning materials (see section 5.2.1). The study materials in most cases included one or more assignments for submission by a given date. Also, in all the courses, written assignments, practical work and tests constituted the continuous assessment which accounted from 30 per cent to 70 per cent of the final marks or course grades at the end of each year (Interview # 12).

Assignments were regarded as important because they formed a part of the total evaluation of the students' progress (Interview #s 2, 12 &15). Lecturer interviewees indicated that assignments helped students to check their progress, to converse with the lecturers and to assess their own strengths and weaknesses (Interview # 13). However, some students from NISTCOL and ZAOU complained that they did not benefit much from the assignments that they wrote because they hardly received feedback from lecturers. One student from ZAOU complained about lack of feedback as follows:

It becomes very difficult because I wouldn't know what to leave out ... so there's the possibility that I will repeat the mistake. So, I recommend that the marked assignments are sent to students and students sign for them, just like we do when handing in the assignments (Interview # 20).

Even though marked assignments enable lecturers to check the students' progress, communicate with the students, assess their strengths and weaknesses, advise students and improve the relationship with students, these functions were compromised because study materials and assignments reached some students from all the institutions late (Interview #s 6, 16, 20, 23, 28, & 30). One student interviewee from NISTCOL shared her disappointment concerning late submission of assignments as follows:

... some students come from very remote places. Usually, research is done in the college and that is the contributing factor for not meeting the deadline. To get the books that are required to write an assignment is really a big challenge (Interview # 6).

Some lecturers did realize the problems that distance students encountered. Because of the numerous responsibilities that distance students had, lecturers were not rigid in the way they handled assignment issues. This becomes evident from the following interview excerpt:

A good number of students abide by the deadlines but a good number again don't, and as a school we've been really lenient because as adult learners we understand their problems too. So we accept those assignments which may come in a little late. Yaah, but we encourage them to be on time. We also encourage them to let us know if they face problems so that we know what is happening (Interview # 24).

The most unfortunate part concerning assignments occurred when students had to write their examinations without having received the feedback on the assignments that they had sent for marking (Interview # 23). In this regard, lecturers complained of late submission of assignments. Study materials could have been ready before students started their courses. Assignments could also have been set and sent to students together with the study materials (Interview #s 6 & 23).

This study revealed that some efforts were being made by the five institutions that offered distance teacher education to overcome problems concerning assignments. For example, students were given assignments during face-to-face contact sessions (Interview # 13). During these periods students accessed library resources and had the opportunity to discuss the assignment topics with their colleagues and lecturers (Interview # 14). However, the face-to-face contacts offered limited time for the students to complete their work. According to this researcher contact sessions are mainly to assist the students to comprehend the concepts being studied. Assignments should be sent to students using any reliable means of communication. For example, assignments can be released to students using mobile phones and/or the internet.

Major challenges which impacted negatively on the completion of the assignments were the inadequate time for writing assignments before the deadlines and the shortage of reference materials prescribed by the lecturers (Interview #s 6 & 20). Concerning reference materials, rural distance students were more affected than their full-time counterparts because the former had no places where they could borrow books. The solution to inadequate reference materials can be found in the integration of education information technologies into distance teacher education. If modern technology was fully used as a method of distance teacher education delivery, many students would access appropriate on-line material. The provision of students with 'self contained' instructional materials would curb the challenge of obtaining reference materials. It would assist remote students who currently face the problem of a shortage of books (Interview # 2).

A serious challenge, already alluded to, was the long time that elapsed from the time students submitted the assignments for marking and the time students received feedback (Interview # 23). The problem, however, varied from institution to institution and from one subject or course to another. Many comments that lecturers made in this regard were in some cases not helpful since assignments reached the students during examinations or even after examinations (see section 5.2.1).

6.3.6 Inadequate records management

Records management should be seen as a vital component in the management of distance teacher education in Zambia. Computer-based information systems are revolutionising the way records in distance education are being created, processed, used and kept (see section 5.2.1). Information communication technologies could therefore have helped distance education practitioners manage distance education records well. Unfortunately, it was noted during this research that there was a challenge in relation to records management at the institutions that the researcher studied (Interview #s 2, 6, 12, 22, 28 & 30). One interviewee made the following remarks concerning records management:

For me looking at the situation of the current DEM, we should improve on record keeping. Students have been telling us that we've lost the assignments, and we don't know whether they actually submitted or not. I think there is a need to keep good records of the date assignments are received and that of marked assignments (Interview # 2).

Both physical and digital (electronic) records should be stored in such a way that they are accessible and safeguarded against environmental damage. The marks for distance students should have been kept in such a way that they could be retrieved quickly. There was a need, therefore, for distance education practitioners to be trained in records management. The integration of information communication technologies in distance teacher education would definitely take care of the concern that marks for students could not be kept properly (Interview #s 5 & 22).

6.3.7 Problems concerning instructional materials

In this section the emphasis is placed on the inadequacy of interactive instructional materials and problems concerning the delivery of study materials. These issues emerged from the interviews, observations and documents that were availed to the researcher.

6.3.7.1 Inadequacy of instructional materials

Nowadays a wide range of teaching media are employed in distance education. Their effectiveness depends on the course content and teaching methods. Instructional material consists of printed materials, audio visual material (other than print) and practical activities such as field work. All teaching media are being used in distance education but there is no standard or ideal combination (see sections 3.11 & 5.2.1).

This study had revealed that in the five institutions namely: UNZA, ZAOU, NISTCOL, NCE and COSETCO, instructional materials were written either individually or in groups (Interview #s 2, 23 & 28). The major disadvantage of single authorship model was that some courses were less satisfactorily presented than others (see section 5.2.1).

The interviewees, both students and staff from the five studied institutions, were of the opinion that instructional materials would be of better quality if they were prepared and edited by independent qualified people (Interviews #s 3, 16, 23, 28 & 29). Indeed, distance education materials need reviewing by more than one person, each working upon the script for a different purpose. Although some interviewees from all the institutions were not happy about the study materials, they did not pinpoint the aspects of the study materials that were flawed (Interview #s 23 & 26). A review of the modules in terms of layout revealed that the modules were quite good. For instance, printed materials provided readability by means of a good lay-out. However, most of the modules analysed by the researcher were not presented in an attractive manner. Although the batches, mainly from the *University of Zambia*, provided the aspect of readability by means of a fairly good layout too (see sections 5.2.1 & 5.2.2) they required to be written in such a way that they were suitable for distance students.

In terms of clarity of print, study materials needed appropriate print size to give students clear and customer friendly instructional materials. Material developers should select a font suitable for the students. It is important, therefore, that distance education practitioners are computer literate to do that which is required in the development of instructional material (also see section 3.9.3). Although the font of the most instructional materials in the institutions that offered distance teacher education programmes is quite good, there is need to use the font that is friendly to most students.

As regards language and style, it was observed that lecturers in almost all the institutions were allowed to adopt their own styles of course presentation (Interview #s 3, 15 & 16). They wrote the study materials in a style that made the text easy to follow. However, the issue of style was of great concern to those who participated in the study as indicated in this interview excerpts:

Because they are using materials for the same courses which are given to full-time students, so, the same lecturer who prepares materials for full-time students also prepares materials for distance students. So, we have come to the point of encouraging lecturers to produce modules instead of batches. We want modules which are interactive (Interview # 7).

Most of the students who participated in this study indicated that they were able to understand the language except in isolated cases where the language made comprehension difficult (Interview #s 6, & 22). In this regard, a student interviewee from the *Zambian Open University* said:

In some courses ... like in my case, I do English, courses like Psycholinguistics and Sociolinguistics, the language was not friendly, so I found it a bit difficult for me to understand those modules. But most of the educational courses the language is easy, you can easily understand the concepts although we've some lecturers whose language is a bit difficult to understand (Interview # 20).

It has to be noted that some students that were interviewed were satisfied with the study materials. Almost all the students interviewed felt that they gained new and useful knowledge from the instructional materials (see section 3.8.4). The majority of the 67 interviewees were of the opinion that instructional materials should be written in such a way that they conform to the characteristics of distance teacher education materials (Interview #s 3, 16, 23 & 28).

6.3.7.2 Problems concerning the delivery of study materials

The study revealed that in some cases study materials and assignments were delivered late to students (Interview #s 5 & 20). The reason for this was that the institutions that provided the distance teacher education programmes did not have an efficient system of producing and distributing study materials (see section 5.2.1). It could be attributed to the inadequacy of the printing facilities and, sometimes, lecturers' late submission of materials for printing (see section 5.2.2). The study materials were mainly distributed during face-to-face contacts (Interview #s 16 # 28). Some students went to the institutions to collect their study materials (Interview # 20). It was also observed that study materials were distributed through the district education offices.

For example, PTDDL modules were either given to students through satellite colleges or district resource centre coordinators (Interview #s 1 & 2). The distribution system was affected by the relative slowness in the communication system (see section 5.2.1). Most of the distance education institutions did not have a system where study materials were taken to the points where they could easily be distributed to students (Interview # 23).

However, on the whole, the distribution system was reliable as evidenced by the fact that very few students did not receive some of their materials. According to the interviewees, those who did not receive some of their materials, used their initiative to travel to the institutions or simply photocopy from their colleagues, situations which could have been avoided. In order for people to accept the fact that one could be successfully trained as a teacher through distance education, such lapses in the provision of distance teacher education should be eliminated as soon as possible (also see section 3.8.1).

6.3.8 Problems relating to staffing

What transpired clearly from the interviews was that the lecturers were not adequately trained to handle distance students. They were unqualified to manage distance programmes (see section 6.3.3). However, they learnt how to manage through experience. In this regard, the following was said: "Although we haven't formerly been trained, using our experience we wrote something for the STDDL students. Nevertheless, given an opportunity to be trained, I think we would willingly accept that" (Interview #s 28 & 30).

Another challenge was that of understaffing. Except for NISTCOL the other four institutions lacked adequate human resources. For example, at UNZA, ZAOU and NCE interviewees complained of inadequate staff in various departments (Interview #s 16, 23 & 29). The same lecturers who taught full-time students also taught distance students (see sections 3.7.1, 3.7.2, 3.7.3, 3.7.4 & 3.7.5). Since there were few lecturers doing a lot of work, it is obvious that quality would be compromised (Interview # 16).

6.3.9 A lack of a national policy on distance education in Zambia

Zambia is not short of guiding policies and strategies except in Open and Distance Learning. The interviewees from the distance education institutions that comprised this multiple case study were in agreement that Zambia was supposed to have a national open and distance education policy (see section 5.2.1). Perhaps a need for a national distance education policy that would guide distance education activities in the country was amongst the most important findings of this study (Interview #s 3, 16, 29, 31 & 32). The Principal of NCE stated: "distance education should not be considered to be an ad hoc method of teaching and learning. The *Ministry of Education* should have a policy of managing distance education" (Interview # 29).

The research revealed that although distance education guidelines were briefly mentioned in the National Education Policy, *Educating Our Future* of 1996, there was no national distance education policy in Zambia. However, at the time of this research the *Ministry of Education* had a draft national distance education policy in place (see section 5.2.1).

The answer to the challenges of teacher education in terms of shortage of teachers and unqualified teachers or less qualified teachers cannot be found in the absence of national open and distance learning policy.

6.4 Summary

This chapter has dealt with the themes that emerged from the findings of this collective case study. The themes that the researcher has discussed relate to the strengths and weaknesses of management of distance teacher education in Zambia. Among the themes that the researcher has discussed concerning the strengths are: a recognition by providers and clients of the importance of distance teacher education and a positive attitude towards distance education. The themes concerning the weaknesses include inadequate student support services, inadequate communication channels, problems relating to integration of ICTs in distance teacher education delivery, inadequate problems concerning assignments and examinations and a lack of national open and distance education policy.

The discussion of these themes has been substantiated by quotes garnered from the interviews. The themes from the findings have also been related to the existing literature and theoretical framework.

The researcher believes that the discussion about the themes that emerged from this study could assist in addressing the challenges of managing distance teacher education in Zambia from a more holistic perspective.

In the next chapter, the researcher focuses on the conclusion and recommendations of the study.

CHAPTER 7

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

In this chapter a recapitulation of the following components of this study will be presented: the background to the study which refers to the research questions and the aims which anchored the research, followed by the theoretical context pertaining to the study, the role of the literature study in this study, the findings resulting from the interviews and the observation, and the analysis of the interviews and observation. This section will be followed by a conclusion which provides answers to the research questions.

Finally, several recommendations pertaining to the management of distance teacher education in Zambia, followed by specific recommendations for tertiary institutions which offer distance teacher education in Zambia, will be presented.

7.2 Summary

This summary serves as a synthesis, presenting the key essentials of this thesis as a coherent and logical whole before embarking on answering the research questions and making several particular recommendations.

7.2.1 Background to the study

Bearing in mind the sparsely documented history of distance teacher education in Zambia the researcher was compelled to undertake a study that would provide more detailed information concerning the management of distance teacher education in Zambia, create a clearer picture of the management of distance teacher education in Zambia and how it could be improved (see sections 1.4 & 1.8).

The investigation was limited to the institutions which had been offering distance teacher education programmes for some time (see sections 1.2 & 1.10), and required an in-depth qualitative approach that covered many aspects of the management of distance teacher education (see section 4.2.1). The researcher conducted semi-structured individual and focus group interviews, made observations and analysed available documents to obtain data that were related to the management of distance teacher education in the institutions under investigation (see sections 4.4.1, 4.4.2, 4.4.3 & 4.6).

The research questions (see section 1.7) which emerged from the motivation for this study (see section 1.4) and which directed this study were the following:

- a) Does the management of distance teacher education at UNZA, ZAOU, NISTCOL, NCE and COSETCO include salient aspects of distance education?
- b) What are the strengths of the management of distance teacher education in Zambia?
- c) What are the weaknesses of the management of distance teacher education in Zambia?
- d) How can management of distance teacher education in Zambia be improved?

7.2.2 Theoretical context and literature review of the study

It was necessary for a study of this magnitude to be placed within the relevant framework of relevant theories. Chapter 2, therefore, focused on the theories that would underpin this. The relevant theories were tentative model of students' retention or attrition, the theory of interaction, the theory of autonomy and independence, and the theory of equivalency.

The literature review which focused on the management of distance teacher education revealed the criteria of efficient distance education, namely continuing professional training and development of distance education practitioners, adequate student support services, adequate channels of communication, integration of information and communication technology in distance education delivery, adequate records management, adequacy regarding interactive

instructional materials as well as availability of guidelines, and national policy on distance education.

7.2.3 Methodological aspects

In order to answer the research questions (see sections 1.7 & 7.2.1), it was deemed necessary to apply the qualitative research approach (see section 4.2.1) and a triangulation of the methods of semi-structured interviews, observations and document review (see sections 4.4.1, 4.4.2 & 4.4.3). The researcher conducted interviews with students, lecturers, as well as distance education managers in the five mentioned institutions which had been offering distance teacher education programmes for a considerable period of time.

7.3 Data analysis of findings

The data that were analysed include field notes on observations, documents and interview transcripts (see sections 4.4.1.3 & 4.4.3). The categories concerning the strong points of the management of distance teacher education in Zambia were as follows:

(a) A recognition by providers and clients of the importance of distance education Distance education providers and clients knew the importance of providing education through distance education. They knew that conversional method of providing education could not cater for all the Zambians who needed formal education, especially at tertiary level.

(b) An awareness of the challenges of distance teacher education as displayed in their guidelines

Education managers, lecturers and students were aware of the problems affecting the provision of distance teacher education in Zambia. Since distance education providers and students knew the challenges facing the provision of distance teacher education in Zambia, they were able to suggest possible ways of improving the management of distance teacher education in Zambia.

(c) A positive attitude towards distance education

This study revealed that education managers, lecturers and students welcomed distance teacher education as a mode of training and enhancing the professional capacity of teachers. The researcher noted that students wanted to complete their studies through distance mode without transferring to full-time studies where they were required to do so.

The weak points were:

(a) Inadequate student support services

The study revealed that there were inadequate student support services in all the five distance education institutions, namely UNZA, ZAOU, NISTCOL, NCE and COSETCO (see sections 5.2.1, 5.2.2.1, 5.2.2.2, 5.2.2.3, 5.2.3 & 6.3.1). However, distance education practitioners acknowledged the fact that student support services are very important and would do everything possible to improve student support services (see section 5.2.3).

(b) Inadequate channels of communication

The channels of communication in the five distance education institutions mentioned above were inadequate. The main modes of communication were by mobile phones, through radios, television and print media (see sections 5.2.1 & 6.32).

(c) Inadequate training and professional development

Generally, lecturers in the five distance education institutions were not fully trained distance education practitioners (see sections 3.7.1, 3.7.2, 3.7.3, 3.7.4, 3.7.5, 5.2.1 & 6.3.3). The conferences, seminars, and workshops that some of the lecturers had attended did not equip them with sufficient distance education knowledge and skills (see section 5.2).

(d) Problems relating to integrating information and communication technology in distance education delivery

In all the five distance education institutions, the problem relating to integrating ICT in distance education delivery was evident (see sections 3.7.1, 3.7.2, 3.7.3, 3.7.4, 3.7.5,

5.2.1 & 6.3.4). However, lecturers and students were aware of the importance of ICT in distance education delivery (see section 5.2.1).

(e) Problems concerning assignments and examinations

The study revealed that there were problems regarding assignments and examinations. Some students wrote examinations without receiving feedback from the lecturers regarding the submitted assignments. This affected their performance in the examinations (see sections 5.2.1 & 6.3.5).

(f) Inadequate records management

The issue of inadequate records management was common in all the institutions except UNZA. Students complained of missing marks even after they had received their marked scripts. It was also not easy to find the number of students registered each semester or academic year by gender (see sections 5.2.1 & 6.3.6).

(g) Problems concerning instructional materials

The research revealed that there were inadequate interactive instructional materials. ZAOU and NISTCOL had in some programmes/courses interactive modules. In some cases study materials and assignments were delivered late to students (see sections 6.3.7.1 & 6.3.7.2).

(h) Problems relating to staffing

The problem of understaffing was noted in all the five distance education institutions mentioned above. Except for ZAOU, which is a single mode institution, the same few lecturers teach both full-time and distance students (see section 6.3.8).

(i) A lack of national policy on distance education in Zambia

As stated in the study, distance education in Zambia can be traced as far back as 1940s when *African Correspondence College* and *National Correspondence College* began offering distance education tuition leading to *General Certificate of Education* qualifications. Unfortunately, up to the time of this study Zambia did not have a national policy on distance education (see section 6.3.9).

To overcome the weak points concerning the management of distance teacher education in Zambia, specific recommendations for each of the major tertiary education in institutions providing distance teacher education in Zambia are provided in section 7.5.

7.4 Conclusion

The conclusion, in other words the answers to the four research questions (see section 1.7), have already been alluded to in the previous section, section 7.3. The answer to the first question, (see sections 1.7 & 7.2.1) which demands an answer to whether UNZA, ZAOU, NISTCOL, NCE and COSETCO include salient aspects pertaining to distance education, can be answered as follows: The salient aspects of distance education mentioned below were noted:

- (a) The study materials of the five distance education institutions studied are reasonably of high quality, but are not friendly to distance students (see section 6.3.7).
- (b) Face-to-face contacts are incorporated in distance teacher education delivery as a way of supporting students at all the five institutions studied. However, many students felt the period for this contact period is not long enough for them to utilize the library facilities very well (see sections 6.3.1.2 & 6.3.1.3).
- (c) Lecturers give students assignments as a teaching strategy at all the five institutions studied. Some students, however, do not receive the feedback at the time they need the tutors' comments (see sections 5.2.1 & 6.3.5).
- (d) Use of ICT facilities such as mobile phones and internet occur at all five institutions studied but are not fully integrated into distance teacher education delivery (see sections 5.2.1 & 6.3.4).

The second question which asks for the strengths of the management of distance teacher education in Zambia can be answered by stating that distance education managers, lecturers and clients recognise the importance of providing education through the distance education mode and

are aware of the challenges affecting distance teacher education as well as having a positive attitude towards distance teacher education in Zambia (see sections 6.2.1, 6.2.2 & 6.2.3).

The third question which demands an answer to the weaknesses concerning the management of distance teacher education in Zambia can be answered by saying that the study revealed areas of concern which should be given attention if institutions that offer distance teacher education programmes are to provide quality education. The areas of concern are: inadequate student support services, inadequate channels of communication, inadequate training and professional development, problems relating to integrating information and communication technology in distance education delivery, problems concerning assignments and examinations, inadequate records management, problems concerning instructional materials, problems relating to staffing, and a lack of national policy on distance education in Zambia.

The fourth question which asks for suggestions to improve the management of distance teacher education in Zambia is answered in section 7.5 which deals with the recommendations and a model for institutions that offer distance teacher education programmes.

7.5 Recommendations

The recommendations contained in this section are aimed at contributing to the optimisation of the effectiveness and operational efficiency of the management of distance teacher education in Zambia. They take into account the realities of the Zambian environment in which distance education as a method of education delivery is used.

7.5.1 General recommendations and a model for distance teacher education institutions

This section deals with general recommendations which could improve the management of distance teacher education in Zambia. It also highlights a model for distance teacher education institutions.

7.5.1.1 General recommendations

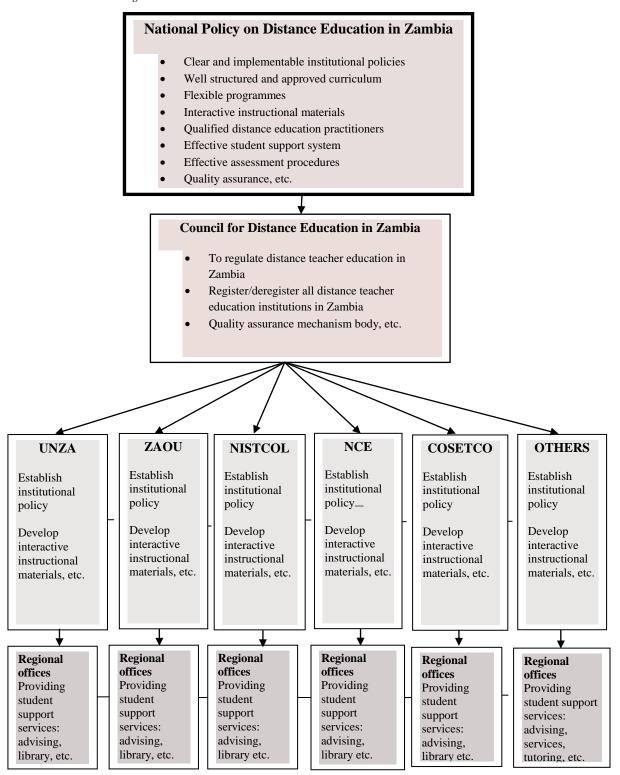
Institutions offering distance teacher education should:

- (a) have an institutional distance education policy derived from the national open and distance learning policy which includes policy with regard to distance education practitioners' training and continuing professional development (see sections 5.2.1 & 6.3.9).
- (b) have a strong decentralized student support system.
- (c) have interactive instructional material. A variety of media use can certainly allow for this, as well as making a course more interesting by means of the provision of alternative modes for students and the encouragement of students to reflect on the material rather than merely concentrating on memorization (see section 6.3.7).
- (d) integrate ICT in distance education delivery.
- (e) belong to a Distance Education Council or a national body that is responsible for the promotion, coordination, and maintenance of quality and standards.

7.5.1.2 A model of distance teacher education institutions in Zambia

In view of the literature study, the analysis of the interviews and observation, and conclusion of this study, the researcher wishes to suggest a model that would be suitable for most if not all institutions that offer distance teacher education in Zambia (see Figure 7.1).

Figure 7.1: A model of distance teacher education in Zambia



Source: Researcher's model

7.5.2 Recommendations for policy makers

In view of the literature study, the analysis of the interviews, observation and the conclusion of the study, the researcher proposes the following recommendations:

7.5.2.1 Establishing national distance education policy

The study had consistently shown that Zambia needed a national distance education policy to guide distance education activities at all levels of education system (see section 6.9). Although the 1996 national education policy, *Educating Our Future*, has emphasized the importance of ODL and the *Ministry of Education* was working out guidelines at the time of this research, interviewees felt that there was a need for a national policy on distance education in Zambia (Interview #s 3, 16, 29, 31 & 32). Therefore, the *Ministry of Education* through DODE needs to formulate and implement a national policy on open and distance education in Zambia (see Figure 7.1). This will minimize the challenges currently being encountered by distance education practitioners (see section 5.2.1).

7.5.2.2 Improving student support systems

The *Ministry of Education* through the *Directorate of Open and Distance Education* (see section 5.2.1) should expedite the development of guidelines concerning counselling and support services that institutions which offer distance teacher education programmes will have to follow (see Figure 7.1).

7.5.2.3 Extending library facilities

The *Ministry of Education* through the *Zambia Library Service* and cooperating partners should establish libraries in areas where there are no libraries (see section 6.3.1.2), and equip them with books as indicated in the 1996 *Zambia National Policy on Education*. The Ministry should also stock the libraries in the existing learning institutions with appropriate books.

7.5.2.4 Accentuating continuing professional development

The *Ministry of Education*, through the *Directorate of Open and Distance Education* (see sections 5.2.1), should ensure that institutions that offer distance teacher education programmes have their lecturers continuously trained in the latest distance education methodology.

7.5.2.5 Improvement of information communication technology

The *Ministry of Education*, through the Information System at the *Ministry of Education* headquarters, should assist institutions that offer distance teacher education programmes with integrating ICT into the education delivery. Information communication technology digital learning facilitates include access to various collections such as journals, magazines, books and websites. Access to open educational resources should be regarded as an urgent necessity for digital education.

7.5.2.6 Distance Education Council

The *Ministry of Education* should spearhead the establishment of the Distance Education Council or any national body that will be responsible for the promotion, coordination and maintenance of quality and standards of distance teacher education in Zambia (see Figure 7.1).

7.5.3 Specific recommendations to institutions that offer distance teacher education programmes

In view of the literature study, the analysis of the interviews and observation, and conclusion of this study, the researcher wishes to make the following specific recommendations:

7.5.3.1 The *University of Zambia*

(a) The *Institute of Distance Education* should develop third and fourth year distance education courses so that those who enroll as distance students complete their

- programmes by distance, unlike in the current situation where distance students transfer to full-time studies after successfully completing second year courses (see section 5.2.1).
- (b) The *Institute of Distance Education* should improve the interaction with students by taking advantage of ICT (see section 5.2.1). The institute should ensure that study materials and other information that students need are available on the university website.
- (c) The *University of Zambia*'s library should be well-stocked with appropriate learning resources. The university should re-introduce the system of lending distance students books for a period of at least three months (see section 5.2.1).
- (d) The face-to-face contacts (see section 5.2.1) should continue to be held and the period of these contacts should be long enough to enable students to use the library and have sufficient interaction time with lecturers and their fellow students. However, the face-to-face contact periods may not be that long once the university has put in place the appropriate student support services which include an integrated ICT system (see Figure 7.1).
- (e) The university should move away from using batches (see section 5.2.2) to instructional materials that are suitable for distance students.
- (f) The university should ensure that regional offices have sufficient staff who will be able to support students (see section 5.2.1 & Figure 7.1).

7.5.3.2 The Zambian Open University

(a) In order to adequately support students, the Council of the *Zambian Open University* should establish regional offices in all the major towns of Zambia (see Figure 7.1). The regional offices should employ sufficient staff and provide information that students may require (see section 5.2.1).

- (b) The university should have qualified full-time staff that will be able to handle the number of students enrolled. It should not depend on the hired staff from the *University of Zambia* (see section 5.2.1).
- (c) The university should improve the interaction with students by taking advantage of ICT. The university should also ensure that study materials and other information that students may require are available on the university website (see section 5.2.1).
- (d) The university should construct a bigger library which should be well-equipped with appropriate books. It should introduce the system of lending students books for a period of at least three months (see section 5.2.2.3).
- (e) Study materials and assignments should be given to students either during residential schools or through centre managers and should reach students in time. Lecturers should also ensure that the marked assignments have constructive comments (see section 5.2.1).
- (f) The *School of Education* should improve its record management system. This will minimize missing results, especially continuous assessment results (see section 6.3.6).
- (g) The university should have a Continuing Professional Development plan for its staff. It is important that distance education practitioners are trained in distance education methodology (see section 5.2.1).

7.5.3.3 The National In-Service Teachers' College

- (a) The college should expedite the development of STDDL modules (see section 5.2.1). Distance students require instructional materials which meet the criteria for distance education materials.
- (b) The college should improve interaction with students by taking advantage of ICT (see Figure 7.1). It should also ensure that study materials and other information that students may require are available on the NISTCOL website (see section 5.2.2.2).

- (c) Lecturers handling *Diploma in Education Management* should not only be trained in distance education methodology but also in educational organisation and management. Distance education practitioners should be conversant with matters concerning educational organisation and management (see section 5.2.1).
- (d) In order to avoid the critical shortage of accommodation that STDDL students face, the college management should use provincial educational colleges as satellite colleges as in the case of the presentation of the PTDDL programme (see section 6.3.1.3).
- (e) NISTCOL library and satellite college libraries should be well-equipped with appropriate resources that students can use, especially for answering their assignment questions (see section 5.2.1).
- (f) The *Department of Distance Education* should improve its record management system to avoid the problem of missing results (see section 5.2.1).

7.5.3.4 The Nkrumah College of Education

- (a) The college should develop study materials (modules) which conforms to the criteria for distance education study materials (see section 5.2.1).
- (b) The college library should be well-stocked with appropriate resources that students can use, especially for answering their assignment questions (see section 5.2.1).
- (c) The college management should train its lecturers in distance education methodology. Distance education practitioners should be conversant with the skills and knowledge required to manage distance teacher education programmes (see section 5.2.1).
- (d) In order to avoid over-crowding during face-to-face contacts and examinations, the college should establish regional offices in the major towns of Zambia (see section 6.3.1.3).

(e) The college should improve interaction with students by taking advantage of ICT (see Figure 7.1). It should ensure that study materials and other information that students may require are available on the college website (see section 5.2.1).

7.5.3.5 The Copperbelt Secondary Teachers' College

- (a) The college should develop study materials (modules) which conform to the criteria for distance education study materials (see section 5.2.1).
- (b) The college management should train its lecturers in distance education methodology. Distance education practitioners should be conversant with the skills and knowledge required to manage distance teacher education programmes (see section 5.2.1).
- (c) The college should improve its interaction with students by taking advantage of ICT (see Figure 7.1). It should ensure that study materials and other information that students may require are available on the college website (see section 5.2.1).
- (d) In order to avoid over-crowding during face-to-face contacts and examinations, the college should establish regional offices in the major towns of Zambia (see section 6.3.1.3).
- (e) The college library should be well-stocked with appropriate learning resources (see section 6.3.1.2) that students can use, especially when answering their assignment questions.

7.5.4 Recommendations for further research

Despite this study's comprehensive nature, the findings have resulted in further questions concerning distance teacher education in Zambia. There are therefore prospects for further research concerning the management of distance teacher education in Zambia. Suggestions for further research are mentioned below:

- (a) Comparisons could be conducted between private and public institutions that offer distance teacher education programmes in order to arrive at a detailed model that best suits the Zambian environment.
- (b) Since this study did not address modes of communication in distance education in detail, this aspect provides room for further research enquiry (see section 5.2.1 & 6.3.2).
- (c) Since this study could not only focus on student support systems, this aspect can be investigated further (see sections 5.2.1 & 6.3.1).
- (d) A study to determine whether former distance students at a given distance teacher education programme perform better as teachers can possibly constitute a topic for further research.

The researcher believes that this study could assist in addressing the challenges of managing distance teacher education in Zambia from a more holistic perspective. The researcher also believes that the problems which were revealed concerning the management of distance teacher education, need to be addressed earnestly and urgently in order to improve the quality of education in the country.

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APPENDIX 1: Letters of request to conduct research

National In-service Teachers' College

P/B E 1

Lusaka

5th March 2009

The Director

Directorate of Distance Education

University of Zambia

P.O Box 32379

Lusaka

Dear Sir

RE: PERMISSION TO CONDUCT RESEARCH FOR DOCTORAL DEGREE IN

EDUCATION MANAGEMENT

I am registered for the above-mentioned programme at UNISA. In accordance with the

requirements for this degree, I am conducting a study to assess the management of distance

teacher education in Zambia.

The time and views about how distance teacher education is managed are much appreciated and

will make a significant contribution both to my research and to the management of distance

education in Zambia. Therefore, you are kindly requested to allow me conduct this research in

the Directorate of Distance Education.

Yours faithfully

Vincent Chiyongo

STUDENT NUMBER: 43419968

P/B E 1

Lusaka

5th March 2009

The Vice Chancellor

Zambian Open University

P.O Box 31925

Lusaka

Dear Sir

RE: PERMISSION TO CONDUCT RESEARCH FOR DOCTORAL DEGREE IN

EDUCATION MANAGEMENT

I am registered for the Doctoral Degree in Education Management at the University of South

Africa. In accordance with the requirements for this degree, I am conducting a study on

"Management of distance teacher education in Zambia".

The research is intended to bring out the present strengths and weaknesses in the management of

distance teacher education in Zambia. The time and views about how distance teacher education

is managed are much appreciated and will make a significant contribution both to my research

and to the management of distance education in Zambia.

Therefore, you are kindly requested to allow me conduct this research in your institution.

Yours faithfully

Vincent Chiyongo

STUDENT NUMBER: 43419968

P/B E 1

Lusaka

5th March 2009

The Principal

National In-service Teachers' College

P/B E 1

Lusaka

Dear Sir

RE: PERMISSION TO CONDUCT RESEARCH FOR DOCTORAL DEGREE IN

EDUCATION MANAGEMENT

I am registered for the Doctoral Degree in Education Management at the University of South

Africa. In accordance with the requirements for this degree, I am conducting a study on

"Management of distance teacher education in Zambia".

The research is intended to bring out the present strengths and weaknesses in the management of

distance teacher education in Zambia. The time and views about how distance teacher education

is managed are much appreciated and will make a significant contribution both to my research

and to the management of distance education in Zambia.

Therefore, you are kindly requested to allow me conduct this research in your institution.

Yours faithfully

Vincent Chiyongo

STUDENT NUMBER: 43419968

P/B E 1

Lusaka

5th March 2009

The Principal

Nkrumah College of Education Board

P.O Box 80404

Kabwe

Dear Sir

RE: PERMISSION TO CONDUCT RESEARCH FOR DOCTORAL DEGREE IN

EDUCATION MANAGEMENT

I am registered for the Doctoral Degree in Education Management at the University of South

Africa. In accordance with the requirements for this degree, I am conducting a study on

"Management of distance teacher education in Zambia".

The research is intended to bring out the present strengths and weaknesses in the management of

distance teacher education in Zambia. The time and views about how distance teacher education

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APPENDIX 2: Interview guide for senior education managers, distance education practitioners and students

INTERVIEW GUIDE

- a) What in your view is distance education?
- b) What do you think are the benefits or strengths of distance teacher education programmes?
- c) In your opinion, does management of distance teacher education influence the quality of education offered through distance education?
- d) What support services are given to distance students, and in your opinion, how effective are they?
- e) How do you communicate with lecturers and students, and in your view, how effective are the communication channels?
- f) Are the lecturers trained in distance education methodology, and are there continuing professional development programmes?
- g) How are the instructional materials prepared, and how suitable are they for distance students?
- h) What challenges do you encounter in managing distance teacher education?
- i) In your view, how can management of distance teacher education in Zambia be improved?