# CHAPTER ONE: INTRODUCTION

## 1.1 BACKGROUND TO THE STUDY PROBLEM

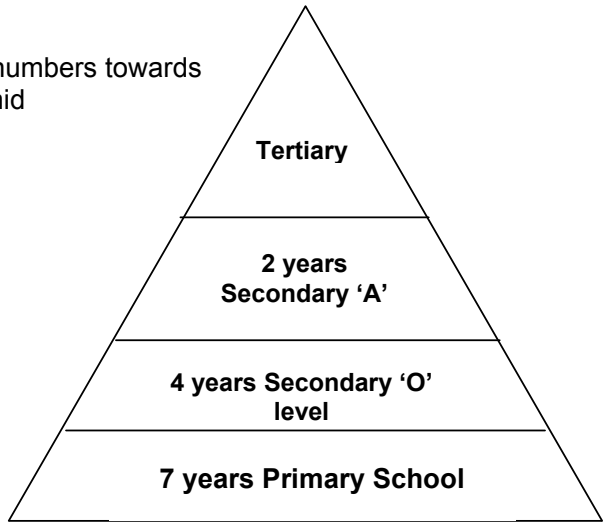
Uganda is set in the heart of Africa astride the Equator. It has a total of 236,860 sq. miles (91,249 sq. km). Of this, swamps and open water cover 17% while forest reserves and national parks cover about 12%. See appendix I for the map of Uganda. By 1999, Uganda had a population of nearly 22 million people with an annual population growth of 2.6% (Ministry of Education and Sports 1999:4). The majority of the people are of school going age. Also, 89% of this population lives and depends on the rural areas for their livelihood.

Christian missionaries introduced school education into the country in 1877 and since then, it has continued to grow. Uganda received its independence from the British on 9th October 1962, and the post independence leaders also continued to put emphasis on education as a tool for development. For, as The World Bank (1988:V) says, *'…without education, development will not occur*'.

The school system in Uganda is structured in a hierarchical manner in a 7-4-2-3 system. That is to say 7 years of primary, 4 years Secondary 'O' level, 2 years Secondary 'A' Level and minimum of 3 years at University level. At the end of each stage, there is a national examination. This structure therefore makes the education system highly selective and pyramidal in nature. Figure 1.1 illustrates this.

*Figure 1.1: Pyramid shaped school education in Uganda*

Decrease in student numbers towards the apex of the pyramid



In spite of this structure, school education has continued to expand since 1962 when Uganda gained its independence from the British. This is because the various governments that have been in power since independence have put a lot of emphasis on the expansion of primary and secondary education as one way of ensuring national development. For example, in 1999, Uganda had 10,500 primary schools and 625 secondary schools (Ministry of Education and Sports 1999:5). But by 2001, these numbers had grown to12,280 primary schools and 1,850 Secondary Schools (Ministry of Education and Sports 2001:3). Private individuals and non-governmental organisations run particularly many of the secondary schools as indicated in the table 1.1.

*Table 1.1: Education institutions in Uganda in 2002*

| | **Primary** | ***Secondary*** | **Universities** | ***Other Tertiary Institutions*** |
|---|---|---|---|---|
| Government | 10,368* | 711 | 4 | 87 |
| Non-governmental | 1,912* | 1,487 | 10 | N/A |
| **Total** | **12,280*** | **2,198** | **14** | |

* 2001 figures
**Source:** Ministry of Education and Sports (2001: 3), Republic of Uganda (2002:119)

It should however be pointed out that, this expansion did not take place during all the years since independence. The Amin-era of 1971 -1979 however affected all sectors of life very negatively. This was a period of anarchy. A period '*…characterised by insecurity, a decline in economic productivity, brain drain, and break down of the social services*' (Aguti, 1996:4). The education system was therefore also affected with decline and decay of physical infrastructure and deterioration in all other teaching/learning facilities.

Tertiary education has also been expanding but not as rapidly as the primary and secondary sections. In 1970, Uganda had one University, one National Teachers College [for the training of lower secondary school teachers], one Technical College and one College of Commerce. Today this number has grown to 4 public universities and 10 private universities; 10 National Teachers Colleges and 4 Technical Colleges, 9 Colleges of Commerce and one Business School (Ministry of Education and Sports 1999:5). With the exception of the private universities mentioned, all the other schools and institutions are government aided. However with the liberalisation of the economy, many private schools and a number of private institutions have been opened in the last decade. Many of these private institutions offer certificate and diploma professional training in different

fields including business studies, computing, tourism, teaching in nursery and kindergarten schools, catering and hotel management.

Whereas the school system has continued to grow, the need for more and better trained teachers still remains. According to the Republic of Uganda (2002:119), the secondary school system has a total of 37,227 teachers. However, 3,512 (9.43%) of these are untrained and 244 are under trained. See also table 3.4 for details of number of teachers their gender and qualifications.

In addition to the untrained and under trained teachers in the secondary school system, many of the Diploma teachers are teaching classes they are not qualified to teach. In the Teacher Utilisation Study, the Republic of Uganda, Ministry of Education and Sports (May 2001:34) concludes,

> The deployment of Diploma holders to teach in advanced classes is not only inappropriate but could also be a reflection of shortage of qualified teachers in the schools affected. This could affect the performance of teachers and undermine the teaching quality and students performance'.

Teacher attrition is another challenge that the school system in Uganda is facing. In 2002 alone, the secondary school system lost a total of 2,845 (7.64%) teachers. Some of these teachers died, some were unable to continue teaching because of long illnesses while others left the service for unknown reasons. Table 1.2 gives the details of teachers' numbers and reasons for leaving teaching.

*Table 1.2: Secondary school teachers' reasons for leaving teaching - 2002*

| **Reason** | **Male** | **Female** | **TOTAL** | **Percentage of Teacher Population** |
|---|---|---|---|---|
| Transferred to non-teaching post | 526 | 143 | 669 | 1.80 |
| Resigned/dismissed | 577 | 130 | 707 | 1.90 |
| Retired | 77 | 25 | 102 | 0.27 |
| Prolonged illness | 72 | 28 | 100 | 0.27 |
| Died | 203 | 47 | 250 | 0.67 |
| Reason not known | 759 | 258 | 1,017 | 2.73 |
| **TOTAL** | **2,214** | **631** | **2,845** | **7.64** |

**Source**: Figures from Republic of Uganda (2002:120)

Uganda has therefore looked at alternative means of meeting the demand particularly of higher education. The government has encouraged entrepreneurs to open up training

institutions or universities and government has also strongly recommended the use of distance and open learning. The government White Paper on Education recommends that '…*an open university should be planned and provided before the year 2000'* (Republic of Uganda 1992:95). Although an Open University has not yet been established, plans are underway to do so. In November 1999, the Minister of State for Higher Education commissioned a Task Force to look into the possibilities of setting up an Open University in Uganda. This Task Force completed its assignment and submitted its report to the Ministry of Education and Sports that is now following this up and the Open University of Uganda should soon be established.

The government White Paper on Education also particularly acknowledges the role that distance and open learning can play in the training of teachers. As pointed out earlier, there has been a tremendous expansion in the school system, to ensure quality education in these schools well-trained teachers are needed. However, the teacher training institutions are not producing enough teachers to meet the demand in schools. Odaet (1988:687) said far back in 1988, that one of the major problems facing the education system in Uganda is '…*the shortage of qualified teachers and the increasing number of unqualified teachers.'* This is unfortunately still true even today. So the Ministry of Education and Sports has recommended the use of distance and open learning methodologies for the training and retraining of teachers. The White paper on Education recommends,

> From 1992/93 onwards crash programmes for training and re-training teachers will be mounted. Increased enrolment and training of teachers will be undertaken … through the in-service system, training on the job and long distance. (Republic of Uganda 1992:4).

To implement these recommendations, Uganda moved on to start distance education projects in teacher training. In January 1992, Mubende and Kiboga districts launched the Mubende Integrated Teacher Education Project (MITEP) so as to train its untrained primary school teachers. The success of this project led to the launching of the Northern Integrated Teacher Education Project (NITEP) with the aim of training the untrained primary school teachers in the northern region of the country. This project has also wound up but the teacher training programme is now being run by Kyambogo University - formerly Institute of Teacher Education, Kyambogo (ITEK) as a national programme. The same applies to the Teacher Development and Management System (TDMS) that was also launched as a pilot project this time for the training of Headteachers. TDMS

wound up as a project and the programme is now also being run by Kyambogo University and will soon be run as a national programme (Makau April 2001:20).

Apart from these efforts at using distance education for the training of teachers, Makerere University, the oldest university in the country, also launched an External Degree Programme (EDP) in 1991. Under this programme, three undergraduate degree programmes are currently being run: Bachelor of Commerce (B.Com), Bachelor of Education (B.Ed) and Bachelor of Science (B.Sc). The B.Ed is meant to upgrade diploma teachers to Bachelors level.

There is growing interest in the private universities also in distance and open learning. Uganda Martyrs' University has, for instance, launched three diploma programmes that are being offered by distance education. Uganda Martyrs' University already has a total of 500 students enrolled for Diploma in Advanced Education Management, Diploma in Democracy and Development Studies and Diploma in Banking Management (Uganda Martyrs' University 2003). Mukono University, another private university, has also launched a Bachelor of Education (B.Ed) programme.

It is therefore clear that Uganda has keen interest in the use of distance and open learning for the education of its citizens. Uganda has particularly used distance and open learning for training, retraining and upgrading its teachers. However, experience has so far shown that most of these programmes are using only print with a heavy reliance on face-to-face or residential sessions. This is disruptive to the teachers, school children and schools as a whole. There have already been some concerns about this particularly with regard to the Makerere University B.Ed (External) programme. It is therefore imperative that Uganda critically looks at the strategies it is using to provide teacher education by distance and open learning.

In addition, Information and Communications Technologies (ICTs) have been used in other countries for purposes of making distance and open learning more flexible and in Uganda, there have been some pilot projects using these technologies for example, The African Virtual University and WorLD Links. However, there is hardly any integration of these technologies in teacher education. So, can teacher education providers revisit the models of training they are using and attempt to utilise these technologies so as to make their distance and open learning programmes more flexible, of higher quality, and more cost effective?

## 1.2 REASONS FOR CONDUCTING THIS RESEARCH

The researcher has, since 1990 been involved in distance education at Makerere University. As a member of staff in the newly created Department of Distance Education, the researcher has witnessed the teething problems of this External Degree Programme from its launch in 1991.

As mentioned earlier, the EDP runs the B.Ed for teachers wishing to upgrade from diploma to degree status. The B.Ed (External) has come a long way since its launching. It has grown from only 198 students admitted in 1991 to now an annual admission of nearly 2,000 students and a current total enrolment of 3,348. However, in spite of this growth, the researcher has noted some weaknesses in the programme that need some attention. Some of these include:

- *Heavy reliance on face-to-face sessions*. The B.Ed (External) students regularly report to the Main University Campus for face-to-face sessions. Face to face sessions are supposed to be supplementary to the study materials however, there seems to be a heavy dependence on these sessions (Robertshaw 2000:4). This is expensive to both the students and the Department since the more the face-to-face sessions the more likely it is for the cost of distance education to rise. Also, frequent face-to-face sessions may disrupt the schools, school children and the teachers' lives because these sessions sometimes take place during the school term.
- *Poor student support*. Heavy reliance on face-to-face sessions is partly because Makerere University is not giving the students adequate support. For example, print material seems inadequate and nearly all the other support services are only available centrally at the main University Campus.
- *Rigid programming.* Makerere University is following a semester system with strict dates of opening and examinations. The EDP was also restructured to follow the same system particularly since the external students and their counterparts sit similar examinations. Although the B.Ed is a three-year programme and its equivalent internal programme is two years, the result of following a semester system places a lot of pressure on the external students and again disruption to schools, school children and the teachers themselves.
- *Inadequate response to changing demands in teacher education.* Teacher education has changed from the kind of teacher preparation that emphasises only teaching skills to the kind of teacher preparation that is focused on the preparation of teachers for democratic and active methods of teaching. There is therefore now a growing

need to help teachers acquire attitudes, knowledge and skills that will prepare them for these democratic and active teaching/learning strategies. This presupposes that more cooperative methods of teacher preparation are used and that there is continuous professional development for all teachers in the school system. Unfortunately, it does not seem that the B.Ed (External) is fully helping equip its teachers. So it may be doubtful that the programme is effectively equipping its students. See also section 3.1.1 that discusses the distinction between teacher education and teacher training.

- *Inadequate integration of other media.* The EDP at Makerere is mainly based on a distance education model that relies heavily on print and is therefore not using other media and yet many other distance education programmes today are introducing new technologies in their programmes. Makerere may be left behind by not keeping up with current trends in distance education.

There is a lot of potential in the new technologies and distance education in Uganda would benefit from exploiting this potential. True there are some challenges in Uganda that may inhibit full exploitation but it should be possible to find models that utilise the new technologies within the limitations in Uganda yet ensure quality and cost effectiveness in the programmes.

It is therefore necessary to examine the EDP model and others being used and from lessons learnt from this move towards designing a model that will perhaps integrate more technologies, lead to more quality and satisfactory training of teachers for as Robinson (1996:9) says,

> Though research and experience point to a combination of media as more effective for learning than a single one, courses for primary teachers in some developing countries, particularly in Africa, have tended to drift towards use of print alone…

Besides all this, watching the growth of the school system in the country and knowing that in some districts children especially in primary schools in the rural areas are being taught by either untrained or under-trained teachers, it is important that alternative means of training teachers be exploited. Teachers are very central to any education system and Uganda cannot therefore afford to watch while the children continue to suffer as a result of being taught by either untrained or under-trained teachers. Also, since distance education is known to have the potential to train teachers fast without disrupting the schools (Evans and Nation 1993:276; Robinson 1996: 6), this is an attractive

alternative which is already being used in the country but which needs revamping especially through the use of new technologies.

The research has therefore been prompted by the researcher's own involvement in distance education and teacher education and by the realisation that with the growth of school education, teachers who are a core element in any successful education system must be trained. This training should be one that will prepare the teachers to be effective in this age of information explosion. Examining contemporary distance education methodologies and their relevance to teacher education in Uganda with a view to recommending a framework for the training of teachers, will be one way of contributing to making education in Uganda relevant to its citizens, efficient and more cost effective.

## 1.3 STATEMENT OF RESEARCH PROBLEM

The demand for education has increased tremendously in Uganda. However, the resources to support this increase have not increased at the same pace. Expansion in colleges and universities is still below the levels of demand. In particular, since the declaration of Universal Primary Education (UPE) in 1997, the primary school enrolment exploded, rising from nearly 2 million children to about 3.6 million that same year. However, by 2003, this enrolment grew to about 7.4 million while in 2001 alone, about 400,000 children wrote the Primary Leaving Examinations. This implies that, in a few years, the number of children graduating from school and desiring to join colleges and universities will be much higher than the current numbers in colleges and universities.

To cope with the massive increase in school enrolment and the subsequent need for more and better-equipped teachers, Uganda has used distance education to provide especially in-service teacher education. However, it is not entirely clear whether the present distance education models used are the best strategies for the effective provision of INSET. It is not clear whether the models are meeting professional and subject demands in teacher education.

The next sub sections expound this problem.

### 1.3.1 Need for more and better quality teachers

Increased demand for education implies increased need for teachers as well at all levels of education. However, to date, Uganda does not have enough teachers particularly in Mathematics and Science and besides, many of those in service are either under-

qualified or untrained. Without adequately trained teachers, it will be very difficult for Uganda to provide high quality education to its people. For example, according to the Republic of Uganda (2002:119), the secondary school system has a total of 37,227 teachers. However, 3,512 (9.43%) of these are untrained and 244 are under-trained, and of those who are trained, there are many that are teaching classes they are not qualified to teach (Republic of Uganda May 2001:34). It is therefore imperative that Uganda provides training for all the categories of teachers needed.

### 1.3.2 Problems with current models of Distance Education

To face up to the challenge of increasing demand for education and for teachers, Uganda has recommended the use of distance education to bridge the gap. Already there are some programmes running. Some of these are pilot and others are institutional. Unfortunately, all these programmes are relying on print and face-to-face or residential sessions. There is hardly any integration of other Information and Communication Technologies. Also, the structuring of some of these programmes is not sensitive to the school terms and so activities are organised for the students during the school term. Reliance on face-to-face sessions and poor structuring of programmes is disruptive to teachers, school children and schools as a whole. This therefore raises a lot of questions about the quality and effectiveness of these programmes to produce teachers who are well prepared and equipped to serve the school system effectively and efficiently.

### 1.3.3 Need to meet the changing demands in Teacher Education

There is change in the general trend of teacher education in many countries from the traditional approach where teaching skills are emphasised to a new approach where learners are expected to participate actively and the teacher's role is that of a support/facilitator (Boulton-Lewis et al. 2001:1, Coetzer 2001:75-76, Dreyer 1994:72, Mcloughlin and Oliver 1999:33). However, for this to happen, teacher education programmes must promote active learning of the trainees. Unfortunately, the B.Ed (External) study package does not seem to promote active learning. With dependence on face-to-face sessions where lectures are the norm, it is difficult to conduct classes that promote active learning. The B.Ed (External) may therefore not be responding to changes in teacher education.

### 1.3.4 Need to integrate new technologies in DE programmes

Also, there seems to be pressure for DE providers to integrate Information and Communications Technology (ICT) in their programmes so as to increase access to education, improve the quality of teaching and learning and reduce costs to education.

The Ministry of Education has sanctioned some pilot projects involving schools in the use of ICTs. For example the WorLD Links Project has been operating in 20 schools in the country since 1996 and is now spreading out nationally. Unfortunately, most of the teachers in these schools have had no knowledge and experience in the use of ICTs. They were not exposed to the use of ICTs in teaching while they were being trained and if as its said, *"you will teach as you were taught"* then how can teachers be prepared to exploit ICTs for teaching purposes?

Unfortunately, it is not certain that Uganda is ready to fully benefit from ICTs in education. Uganda is still inundated by poverty, poor social and technological infra structure, poor attitudes towards DE and ICT, high cost of equipment and uncertainty about the sustainability of such programmes.

The challenge therefore is how best DE can fully benefit from the advantages of ICTs in the provision of teacher education while at the same time, ensuring quality in the programmes, and the teaching/learning experience and also ensuring cost effectiveness for as Perraton, (2000:23) says, '…m*inisters of Education have a costly impossible portfolio. In developing countries, they face the conflicting pressures to expand education and improve it'.*

Hence, it would be important to identify a framework that will allow Uganda to revisit its teacher education programmes and to integrate ICTs while taking into consideration the inadequacies in finance, infrastructure and attitudes.

### 1.4 AIM OF THE STUDY

This study was guided by the following aim:
'To critically examine the existing model for the provision of distance education In-Service Teacher Education (INSET) for secondary school teachers in Uganda against existing contemporary distance education theories and practice, identify the model's strengths and weaknesses thereby establishing its efficacy to provide quality teacher education and suggest a framework for improvement'.

To achieve this general aim of the study, the study was guided by specific objectives given in the next section.

## 1.5 STUDY OBJECTIVES

Taking into consideration the above mentioned aim, the study therefore sought to:

1. Critically analyse the various theories and practices of distance education and the different typologies of distance education institutions
2. Review the different definitions and forms of teacher education
3. Trace and analyse the development of teacher education in Uganda
4. Determine the extent to which distance education is a viable option for the provision of quality Teacher Education in Uganda.
5. Identify the factors impacting Teacher Education by distance in Uganda.
6. Assess the extent to which Information Communications Technologies (ICTs) can be integrated in the provision of Teacher Education by Distance In Uganda
7. Propose a framework that would be appropriate as a guideline for the provision of quality In-Service Teacher Education using distance education in Uganda.

## 1.6 SIGNIFICANCE OF THE STUDY

This study on In-Service Distance Education for the Education of Secondary School Teachers In Uganda is an important study that is likely to be of particular significance to:

- Makerere University, which is currently running the biggest distance education programmes in the country.
- Policy makers in education especially those involved in teacher education and this includes Ministry of Education and Sports officials, principals and directors of teachers' colleges.
- Other Universities running or planning to run distance education programmes
- Any other researchers interested either in distance education or in teacher education.

Distance education is growing as an alternative form of providing education and in Uganda it has been used mainly for the training of teachers. This growth of distance education is based on the assumption that it is a viable option for meeting increasing demands for education especially for higher education. And in relation to this, it has been used in many programmes for training and retraining of teachers and in some of these programmes it was seen to achieve a lot (Makau April 2001:1, Perraton 1993a, Perraton, Creed and Robinson 2002:7). It is therefore vital for Uganda to fully appreciate the potential of distance education in meeting the needs for more and for better-trained teachers in the country.

However, in spite of distance education having been used widely for the training and retraining of teachers, there have been some misgivings about its efficacy and it has been accused of promoting surface learning, being ineffective for practical skills, having high drop out rates, and sometimes promoting elitist learning (Holmberg 2001:73, Keegan and Rumble 1982:228, Paul 1990:79 & 85, Perraton 2000:12). Uganda has run a number of programmes since 1991 and Makerere University currently has the biggest distance education programme in the country. It is therefore vital that Makerere University and the various Ministry of Education and Sports officials and any other teacher educators revisit these programmes so as to identify the problems and challenges they face and eventually plan better ways of providing teacher education using distance education. Studies such as this one is one way of revisiting these programmes with a view to making them better.

Since 1991 when Makerere University launched its External Degree Programme (EDP) that includes the Bachelor of Education (B.Ed. External), there has been no evaluation of the programme and neither have there been any impact studies of the programme. Yet, it is not advisable to continue running any programme for this long (more than 10 years) without such studies. This study is therefore a step towards doing this since it focused on the B.Ed (External) programme.

In addition, Information Communication Technologies (ICTs) have been closely associated with distance education. In fact, distance education and ICTs are inseparable (Amundsen 1996:67). The advances in technology today especially since the onset of computers, Internet and World Wide Web (www) have made distance education programmes much more versatile. However, Uganda's programmes do not seem to have widely integrated ICTs in their programmes yet it is assumed that ICTs have the potential to enrich teaching/learning in any distance education programmes. It is therefore vital to identify challenges to this integration and to determine how this can be achieved in spite of the limitations in Uganda.

## 1.7 SCOPE AND LIMITATIONS OF THE STUDY

Distance education has been used for a variety of programmes in Uganda by both public and private institutions and in the last few years there is been a growing number of international institutions also advertising their distance education programmes in the country and therefore presumably recruiting students. However, this study focused on In-Service teacher education specifically for secondary school teachers; and since at the

time of starting this study, Makerere University was the only institution providing INSET for secondary school teachers, a closer attention was paid to Makerere's B.Ed (External) programme.

There were a number of challenges faced during this study that may have limited it in a number of ways. Related to this was the challenge of having to visit many districts within a short period of time and having to reach many respondents scattered in these districts. Sampling of respondents was also challenging especially since the researcher did not have a list of the population of the study.

Since the study was largely qualitative, a huge amount of data was generated and the process of reducing this data and analysing it was long and tedious. In addition, the following were also challenging:

- Insecurity in the North of the country.
- Busy schedules for many of the officials that made it difficult for them to easily avail themselves for the study.
- Literature on distance education in Uganda is very limited so it was not always possible to get this literature.

Limitations of this study are discussed in more detail in chapter eight section 8.5.

Distance education is growing in the country and it is therefore important that there is continuous review and evaluation of running programmes for continuous improvement. Although this study focused on teacher education programmes, Makerere University's B.Ed (External) in particular, the findings here could nevertheless be generalised to other teacher education programmes bearing in mind the fact that the framework recommended here is not necessarily a blue print that must be followed but it can be taken as a guideline for much more comprehensive and focused discussions.

## 1.8 BASIC ASSUMPTIONS OF THE STUDY

This study was undertaken with the following assumptions in mind:

1. In-Service Teacher Education (INSET) is part and parcel of the teacher development continuum and is vital for continuous professional and academic improvement of the teachers.
2. Knowledge and skills teachers acquire during initial teacher education could become obsolete so teachers are in constant need of INSET.
3. Distance education is a viable option of providing INSET.

4. Quality INSET programmes provided through distance education are dependant on quality distance education programmes.
5. Information Communication Technologies (ICTs) are vital for enriching teacher education programmes run by distance education.

## 1.9 RESEARCH QUESTIONS

This study was carried out with the hope of addressing the study problem stated and so as to achieve the stated objectives. To guide this process, the following research questions were therefore stated.

1. What are the various theories of distance education and the different typologies of distance education institutions?
2. What are the different definitions and forms of teacher education?
3. To what extent can distance education be a viable option for the provision of high quality teacher education that effectively meets education needs in Uganda?
4. What are the practical demands in teacher education by distance and are the current teacher education programmes meeting these demands?
5. What factors are impacting teacher education by distance in Uganda?
6. What are the strengths and weaknesses of teacher education programmes that have been offered through distance education in Uganda and how can these programmes be improved?
7. What are the strengths and weaknesses of the Bachelor of Education (External) programme and how far is it helping teachers acquire the required competencies?
8. To what extent can Information Communications Technology be integrated in the provision of Teacher Education by Distance In Uganda?
9. How should a distance teacher education model be designed to meet the needs and demands in Uganda?

## 1.10 CONCEPTUAL FRAMEWORK

The conceptual framework of this study is based on first of all the view that In-Service Teacher Education (INSET) is an integral part of the teacher education continuum that consists of 'initial training →induction and finally →in-service' (Aspland and Brown 1993:18). For a more fully rounded teacher whose knowledge and skills is continuously renewed resulting into growing mastery and professionalism, INSET is vital. INSET programmes should therefore be designed based on identified needs of the teachers and

run in a manner that will promote growth and education of better teachers. The programmes should, efficiently and effectively produce high quality teachers.

Secondly, this conceptual framework is based on the premise that '*…distance education programmes are systems of teaching and learning*' (Dhanarajan 2001:21). Therefore regardless of how the programmes are designed and the technology utilised, all teaching/learning functions must take place.

Hence INSET programmes run by distance education should therefore be programmes that are designed to meet identified needs and should be run in such a manner that all teaching/learning activities of the programme are effectively and efficiently run.

## 1.11 RESEARCH STRATEGIES AND METHODS

To carry out this study a number of strategies were used. A summary of these will be given here but chapter four specifically focuses on these strategies and methods.

### 1.11.1 Population and sample

The population in this study comprised students, tutors and managers of the Bachelor of Education and Bachelor of Science (External) programmes, prospective students of the B.Ed (External) programme and policy makers of teacher education. The choice of the sample was based on their importance to the study; and ultimately the total sample drawn was 305 with 185 students, 49 prospective students, 36 tutors and managers, and 35 policy makers. This sample can be said to be representative because it included all the stakeholders of B.Ed (External) programme. See also section 4.6.1 for a further discussion of sample representativeness.

### 1.11.2 Data collection

To achieve objectives set out in this research a number of research instruments were used. Also to ensure proper administration and maximise participation of the respondents, some procedures were followed. Three instruments were used (see section 4.7 for details on the data collection procedures):

- ***Literature review*** that helped lay a strong theoretical basis for the study.
- ***Questionnaires***. Different types of questionnaires were designed for the different categories of people and this was so as to establish both qualitative and quantitative data. See appendices II –V for samples of the different questionnaires used.

- ***Structured interview schedule*** which was used to gather information from policy makers.

A pilot study was conducted prior to collecting data. This was so as to ascertain the reliability of the instruments used. The findings of the pilot study were used to refine the instruments. In addition, to ensure validity, the supervisors and the research support team also reviewed the instruments. This is discussed in greater detail in sections 4.4.2 and 4.8

### 1.11.3 Data analysis

The data gathered was both qualitative and quantitative. To prepare for data analysis of the qualitative data, meaningful themes or patterns were derived; each of the categories was then assigned a number and the numbers used for coding purposes. Section 4.9 discusses this further.

After all the data was coded, it was analysed with the help of the Department of Statistics in the University of Pretoria using the statistical package SAS Version 8. Percentages and frequency diagrams were used to indicate the distributions of the different views expressed and the Chi-square test used to determine levels of significance.

## 1.12 DEFINITION OF KEY TERMS AND CONCEPTS

A number of terminologies have been used in this study and there are also some key concepts whose understanding is critical for a full appreciation of the study. The list of terms and concepts has been given here and each of them defined but this should not be taken to imply any other concepts or terminologies are of less importance. Also, the definitions given here, although derived from various literature, have been defined as used in the study.

### 1.12.1 Learning

The first view taken in this study is that learning takes place all the time and also that learning is '*…is the development of new knowledge, skills, or attitudes an individual interacts with information and the environment'* (Heinich et al. 2002:6). According to this definition, interaction is important for learning to occur and this interaction is not limited to interaction with teachers only but includes anything else that will promote learning. In this study, it is therefore understood that learning can take place as a result of interacting with media, teachers, other students, the community around and any form of literature.

The second view taken then, is that learning must be active. In other words, the learners must participate and contribute to the learning process.

**1.12.2 Learner**

A learner is therefore one who engages in any learning activity. This implies that any person regardless of age can be a learner. So, in this study, this word is sometimes used to refer to the teacher trainee and in other cases to refer to a school child. The specific meaning attached to it will therefore depend on the context in which it is used. Also, the word learner is used synonymously with the word student.

**1.12.3 Teaching**

According to The World Book Dictionary, (Barnhart 1995:2152) to teach is to *'…help to learn; show how (to); make understand…'* Teaching is therefore the process of facilitating learning and nurturing learners. In this study therefore teaching is taken as a facilitating role and this goes beyond giving learners information but involves offering all necessary support in the learning process.

**1.12.4 Teacher**

Arising from what has already been said about teaching, a teacher is therefore one who facilitates or helps learners learn. Although this study is focusing on INSET for secondary school teachers, the word teacher has been used to refer to one who facilitates learning regardless of level.

**1.12.5 Teacher Education**

This term and teacher training are often used synonymously to refer to the process of helping teachers acquire attitudes, knowledge and skills that they need so as to carry out their duties and responsibilities as teachers. However, the term teacher training sometimes refers to only acquisition of teaching skills, in this study therefore the term **teacher education** with its emphasis on broader skills, knowledge and attitudes will be used.

**1.12.6 In-Service Teacher Education (INSET)**

This is the form of training and education of teachers who are already serving the school system. This can therefore be the training and education of untrained teachers, additional, further or supplementary education and training for the already trained teachers. Courses offered can be credit or non-credit and can therefore be provided through seminars, workshops, conferences, short courses, and long courses (Bagwandeen and Louw 1993:108-117). The acronym INSET has been used throughout

this study because, although it refers to In-Service Teacher Education and Training, it is used here whenever In-Service Teacher Education is being discussed.

**1.12.7 Information Communication Technologies (ICTs)**

This is a collective term used to refer to all the different information technologies that can be used in the provision of distance education. In this study it is used to include radio, print, television, audiocassette, video, telephone, computers and Internet. The plural for 'technologies' has been adopted because it includes the different types of technology.

**1.12.8 Student support**

This is a system of services meant to help students

- …develop their understanding of the content,
- help the student identify areas of weakness and to overcome these,
- provide administrative support such as counselling, …

(Robertshaw 2000:2)

In this study student support has therefore been used to include all services that will ensure that the distance education programme helps the students achieve all that Robertshaw (2000:2) refers to here. These services include provision of information, face-to-face sessions, student group meetings, library services, guidance and counselling.

**1.12.9 Study materials development and provision**

Distance education is dependant on study materials to carry out teaching functions, so study materials development is the entire process of designing, producing and providing quality study materials to students. This embraces the process of designing, producing and providing all study materials regardless of the technology being used, with the ultimate purpose of crafting an effective learning environment (Murphy 2000:2). This process therefore includes taking decisions on, among others, technology to be used, the content to be included in the study materials, learning and assessment processes, training of course developers, production options, evaluation of the study materials, delivery and access strategies.

**1.12.10 Framework**

This has been used to refer to a set of ideas and guidelines. A structure upon which can be built detailed and comprehensive guidelines or system of quality distance education programmes for In-Service Teacher Education.

## 1.13 ORGANISATION AND STRUCTURE OF THE REPORT

This study consists of eight chapters that are all interrelated and form the whole. Although each chapter focuses on specific issues, they together form one whole report of the study. They should therefore be read as parts of one whole.

The background to the study is given in chapter one. This chapter also includes the reasons for the study, states the research problem, research objectives, and questions.

Chapters two and three give the theoretical analysis upon which the whole study is based. Chapter two provides the conceptualisation of distance education by tracing its historical development, exploring some of the theories underpinning it and relating these to distance education in Uganda. From these theories, key characteristics of distance education were identified. The chapter also discussed some of the various distance education programmes that have been run in Uganda since 1990 and the major features of these programmes discussed. Chapter three on the other hand explores In-Service Teacher Education provided in Uganda through Distance Education since 1990.

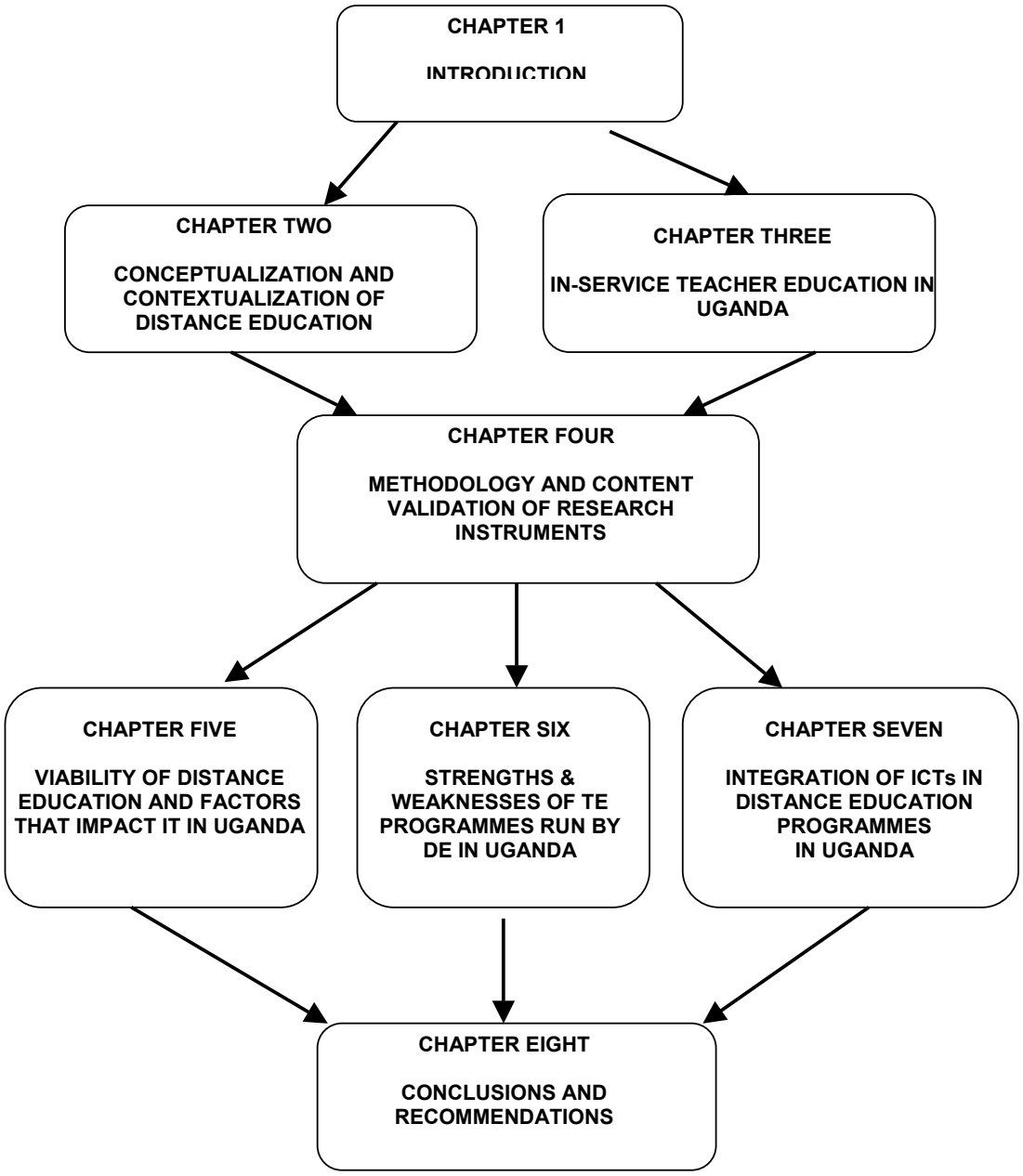
Chapter four then presents the methodology that was used to carry out the study highlighting the instruments used, the sample and the content validation of the research instruments.

The results are then presented in three chapters each focusing on a specific theme that the study explored. Chapter five examines the viability of distance education and factors that impact it in Uganda, chapter six the strengths and weaknesses of the programmes that have been run in Uganda and chapter seven focuses on the integration of ICTs in distance education programmes in Uganda.

Chapter eight is the final chapter and presents the conclusions and recommendations made in the study. In particular it presents a framework for the improvement of In-Service Distance Education for the Education of Secondary School Teachers in Uganda.

Figure 1.2 is therefore a diagrammatic representation of the organisation and structure of the study.

*Figure 1.2 Organisation and structure of the report*




## 1.14 SUMMARY

This chapter has presented the introduction to the entire study. In so doing, the background to the study and to the research problem is given. There is a general increase in the need and demand for higher education in Uganda; however, existing facilities cannot meet this and so the country is considering distance education as an

option of meeting this need and demand. In particular, distance education has been recommended and used for teacher education. In spite of the achievements using these programmes, there seem to be some challenges faced. The chapter then presents the research problem, objectives, and questions.

A summary of research methods used is also given and finally, the structure and organisation of the study is presented.