

An Evaluation of the In-service Training
Programme for Elementary School Teachers in
Eritrea

Mekonnen Estifanos Teclu

A mini-thesis submitted in partial fulfillment of the requirements for the
degree of Magister Philosophiae (M. Phil.) in the Faculty of Education,
University of the Western Cape, South Africa.



UNIVERSITY *of the*
WESTERN CAPE

Supervisor: Dr Clarence G. Williams

September 2003

DEDICATION

This mini-thesis is dedicated to the loving memory of my mother.



UNIVERSITY *of the*
WESTERN CAPE

KEY WORDS

Evaluation

Elementary school

Teachers

Eritrea

In-service training

Unqualified

Practical value of INSET

Course materials

Incentives/reward

Practical arrangement of INSET



UNIVERSITY *of the*
WESTERN CAPE

ABSTRACT

One of the biggest challenges to providing high quality education in Eritrea has been the provision of enough teachers who are professionally competent to meet the demands of the education system. Consequently, the upgrading qualification of teachers through In-service Training (INSET) has received concerted attention from the education authorities since independence in 1991.

The target group at which the programme is directed are those elementary school teachers who were recruited and who, according to the Government's policy, are regarded as unqualified. The primary goal of the INSET is to provide these teachers with the basic teachers qualifications. The second goal is to assist them in their professional development as teachers.

The study aims to evaluate the INSET programme that was undertaken from 2000/2001 and 2001/2002 during the summer holidays. In order to place the study in a wider context, relevant literature with regard to the definition of INSET, the aims of INSET, INSET in other countries, modes of delivery of INSET and evaluation of INSET were reviewed. As part of the situation analysis in Eritrea interviews were conducted with six trainees, five INSET trainers, two school principals where the trainees are currently working and the Director of Human Resources Development at the Ministry of Education.

In evaluating the INSET programme, the following aspects were considered: practical arrangements (venue, accommodation) of the INSET, course materials (handouts), course presentation, practical value of the INSET, and incentives/reward.

The evaluation shows that the INSET enabled the trainees to acquire knowledge and skills, especially in subject matter mastery and the pedagogical aspects of teaching. Trainees stated that they became confident and showed improvement in carrying out their professional duties. The study also revealed that the INSET has weaknesses. The short duration, shortage of course materials (handouts), delay of salary adjustment,

inconvenient venue and accommodation and incompetent trainers were the aspects of the INSET that respondents complained about.

To improve subsequent INSET programmes for unqualified elementary school teachers in Eritrea, some recommendations are made. These include the need for school-based INSET, the need for distance education, the need to extend the duration of the INSET, the need to offer teachers the opportunity for further study at a higher institutions, the need for INSET policy, the need for competent INSET trainers, and the need for salary adjustment.



UNIVERSITY *of the*
WESTERN CAPE

DECLARATION

I, the undersigned, hereby declare that *An Evaluation of the In-service Training Programme for Elementary School Teachers in Eritrea* is my own work, that it has not been submitted for a degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Mekonnen Estifanos Teclu

September 2003

Signed.....



UNIVERSITY *of the*
WESTERN CAPE

ACKNOWLEDGEMENTS

I particularly wish to express my deep gratitude and appreciation to my supervisor, Dr Clarence G. Williams, for his constructive comments, guidance, unconditional support and constant encouragement in the writing of the whole mini-thesis. His influence on me has been immeasurable.

I also extend my gratitude to the Ministry of Education of the State of Eritrea and the University of Asmara for giving me the opportunity to continue my study at the University of the Western Cape, South Africa.

My heartfelt thanks goes to the Director of the Human Resources Development in the Ministry of Education, teachers, trainers and school principals who kindly allowed me to conduct interviews with them for the study. My appreciation also goes to Hadish Tesfamariam in the Ministry of Education and Solomon Weldemicael for their assistance and encouragement.

My wife, Letekidan Negash, deserves my sincere appreciation for looking after our children during my two years of absence from home while pursuing this study at the University of the Western Cape, South Africa.

Finally, my heartfelt thanks go to all my family and colleagues for their encouragement.

| TABLE OF CONTENTS | Page |
|-----------------------|------|
| Dedication..... | i |
| Key words..... | ii |
| Abstract..... | iii |
| Declaration..... | v |
| Acknowledgements..... | vi |

CHAPTER ONE

ORIENTATION OF THE STUDY

| | |
|---|----|
| 1.1 Background | 1 |
| 1.2 Problems regarding the provisioning of quality teachers | 3 |
| 1.3 Theoretical framework | 7 |
| 1.4 Purpose of the study..... | 9 |
| 1.5 Research questions..... | 9 |
| 1.6 Significance of the study..... | 10 |
| 1.7 Scope of the study | 10 |
| 1.8 Limitation of the study | 11 |
| 1.9 Layout of the mini-thesis..... | 12 |

CHAPTER TWO

LITERATURE REVIEW

| | |
|--|----|
| 2.1 Definitions of INSET..... | 13 |
| 2.2 Aims of INSET..... | 16 |
| 2.2.1 Educating teachers to serve as change agents..... | 16 |
| 2.2.2 Assisting teachers to adjust to changing conditions..... | 18 |
| 2.2.3 Contributing towards the academic and professional development of teachers..... | 19 |
| 2.2.4 Preparing teachers to meet legal requirements..... | 22 |
| 2.2.5 Providing upward mobility and promotion opportunities to teachers.... | 23 |
| 2.2.6 Supplying teachers for the education system in developing countries...24 | |
| 2.2.7 Combating 'Burn-out'..... | 25 |

| | |
|---|----|
| 2.3 INSET in other Countries..... | 27 |
| 2.4 Modes of INSET..... | 33 |
| 2.4.1 School-based INSET..... | 33 |
| 2.4.2 School-focused INSET..... | 34 |
| 2.4.3 Short courses..... | 35 |
| 2.4.4 Vacation courses..... | 35 |
| 2.4.5 Distance education..... | 36 |
| 2.5 Evaluation of INSET..... | 38 |
| 2.5.1 Definitions of evaluation..... | 38 |
| 2.5.2 Summative and formative evaluation..... | 39 |
| 2.5.3 Purposes of evaluation..... | 40 |
| 2.5.4 Methods of enquiry in evaluation..... | 41 |
| 2.5.4.1 The Kirkpatrick Four-Level Model of Evaluation..... | 41 |
| 2.5.4.2 Kaufman's Five-Level Model of Evaluation..... | 42 |
| 2.5.4.3 The CIRO Approach..... | 42 |
| 2.5.4.4 The CIPP Model..... | 43 |
| 2.5.4.5 The Illuminative Model..... | 43 |
| 2.6 Conclusion..... | 44 |

CHAPTER THREE

RESEARCH METHODOLOGY

| | |
|---|----|
| 3.1 Introduction..... | 47 |
| 3.2 Research design..... | 48 |
| 3.2.1 The data collection tool used in the study..... | 49 |
| 3.2.2 Data collection through interviews | 53 |
| 3.2.3 Sample description..... | 55 |
| 3.3. Research ethics..... | 56 |
| 3.4 Conclusion..... | 57 |

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

| | |
|--|----|
| 4.1 Introduction..... | 59 |
| 4.2 Data presentation and analysis..... | 61 |
| 4.2.1 Interviews with the INSET trainees..... | 61 |
| 4.2.1.1 Practical arrangements of the INSET..... | 61 |
| 4.2.1.2 Course materials..... | 65 |
| 4.2.1.3 Course presentation..... | 66 |
| 4.2.1.4 Practical value of the INSET | 68 |
| 4.2.1.5 Incentives/rewards..... | 75 |
| 4.2.2 Interviews with the INSET trainers..... | 76 |
| 4.2.3 Interviews with the school principals..... | 78 |
| 4.2.4 Interviews with the Director of the Human Resources Development...82 | |
| 4.3 Discussion..... | 84 |
| 4.3.1 Practical arrangements of the INSET..... | 84 |
| 4.3.2 Course materials..... | 86 |
| 4.3.3 Course presentation..... | 86 |
| 4.3.4 Practical value of the INSET..... | 88 |
| 4.3.5 Incentives/rewards..... | 89 |
| 4.4 Conclusion..... | 90 |

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

| | |
|-------------------------------------|-----------|
| 5.1 Introduction..... | 91 |
| 5.2 Recommendations..... | 92 |
| 5.3 Areas for further research..... | 97 |
| 5.4 Conclusion..... | 97 |
| BIBLIOGRAPHY..... | 99 |

APPENDICES

Appendices Ia and Ib Permission Letter from the Eritrean Human
Resources Development Project (EHRD) Project
Coordinating Unit (PCU), University of Asmara

Appendix II Permission Letter from Human Resources Development (HRD),
Ministry of Education

Appendix III Interview questions for the INSET trainees

Appendix IV Interview questions for the INSET trainers

Appendix V Interview questions for the school principals

Appendix VI Interview questions for the Director of Human Resources
Development



UNIVERSITY *of the*
WESTERN CAPE

CHAPTER ONE

ORIENTATION OF THE STUDY

1.1 Background

Eritrea is strategically located north of the Horn of Africa. It is bordered in the north and west by Sudan, in the southeast by Djibouti, in the south by Ethiopia and in the east by over 1000 kilometers of Red Sea.

Like many other African countries, Eritrea inherited its educational system from its colonizers, namely Italy, Britain and Ethiopia.

Italy formally established a colony in Eritrea in 1890 and it remained so until the British defeated the Italians during the Second World War in 1941. During the first period of Italian occupation (1897-1907), education was seen as a threat to colonialism as colonies could only be maintained by a strict separation of the races, by the cultivation of the European prestige in relation to the colonized and by denying the indigenous population access to Western education (Harber, 1997). However, Harber explains that schooling for Eritreans was changed and state schools were opened in order to produce sufficiently educated workers who would serve the needs of the colonial state. Textbooks in use during the period of Italian occupation stressed the greatness of Italy, the civilizing benefits of colonial government, and improvement in the economy since colonization and the non-existence of pre-colonial history in the Eritrean region. Even though new schools were built during the Italian colonial period, native Eritreans were not allowed to progress beyond four years of primary education. One of the reasons for this was that educated Eritreans might become a risk to Italian control of the colony.

During British rule (1941-1950), Eritrea was partitioned into Ethiopia and Sudan in such a way as to allow the Eritrean Abyssinians to join their Kinsmen in Ethiopia and the Moslem tribes of Western Eritrea to be incorporated into Sudan (Ghenet, 2001).

The British used religion and district as a means of discrimination. The education that was provided to the Eritrean people during the British occupation was designed to impart an overdose of British culture (Teklehaimanot, 1996, as cited in Ghenet, 2001). Moreover, the curriculum remained academic, insufficiently answering the needs and interests of ordinary Eritreans (UNICEF, 1994).

In the Federal period (1952-1962), Eritrea passed from the British Military Administration to a federal arrangement with better educational facilities than Ethiopia (Gottesman, 1998). Quoting the Provisional Government of Eritrea Science and Technology Education, Gottesman further states that the enthusiasm and thirst for education that was aroused during the British Administration also continued during Federation. The 1952 Eritrean constitution guaranteed residents the right to education; it also declared Tigrigna and Arabic the official languages, and these were used for primary education up to grade four, with English thereafter. Despite the high enthusiasm for education, the then Federal Government of Eritrea was not able to expand schools and offer education for all who wanted to learn (Gottesman, 1998).

During the federal period, Haileselassie (the erstwhile emperor of Ethiopia) began to undermine Eritrean education, along with other institutions. After annexation in 1962, a new curriculum was introduced. Amharic (the official language of Ethiopia) became the language of instruction in primary schools. When students failed in Amharic, they lost the opportunity of pursuing higher education - even if they had good results in other subjects. The main aim was to Ethiopianize Eritreans. To assure full achievement of this aim, Eritrean teachers were transferred to other parts of Ethiopia and replaced by Ethiopian teachers. Moreover, Ethiopian textbooks written in Amharic were imported to Eritrea.

After the overthrow of Haileselassie, in 1974, by the Marxist-Leninist inspired military, the Government of Ethiopia began to tighten its grip on education as a potential focus of resistance. School children and university students caught demonstrating were gunned down on the spot (Tesfagiorgis, 1992, cited in Harber, 1997). Spies and informers within both the staff and student body created mistrust and tension - those suspected of working for liberation were regularly arrested and tortured. Strengthening control over what happened in schools minimized the control

of schools by individual head teachers. The military regime also encouraged mass promotion regardless of competence so that students, especially those who failed and were frustrated, would not join the liberation front. Many schools in both urban and rural areas were confiscated by the Ethiopian army and used as barracks (Harber, 1997).

As described above, the education system during the colonial period was not well organized. The academic status of students was low due to the fact that there were inadequate human (qualified teachers) and material resources, like laboratories, classrooms and textbooks. As a result, students were faced with various disadvantages such as weak study skills, poor proficiency in English, and in some cases learning problems. To sum up, the nature of colonial education, which only benefited the colonizers, had major deficiencies in terms of its neglect of Eritrean culture, language and history as well as the realities of life.

After thirty years of war, Eritrea obtained its *de facto* independence in May 1991 and its official independence in May 1993 after a United Nation supervised referendum. After the long war, Eritrea was in acute need of reconstruction and rehabilitation as the economy, and infrastructure had collapsed, and social services including education had disintegrated. Its human resources development was greatly hampered during the struggle as its youth were persecuted and displaced.

1.2 Problems regarding the provisioning of quality teachers

The quality of education had so much deteriorated that there was a crisis in the education system in Eritrea (Ministry of Education, 1999). The Department of Education of the Provisional Government of Eritrea (1993) summarized the major problems the education system faced after independence as follows:

- unequal distribution of educational opportunities.
- a big shortage of schools, and a large number of schools badly damaged.
- shortage of teachers, both qualitatively and quantitatively.

- a very low academic level among students, and also among teachers.
- illiteracy rate over 80%.

To remedy these problems, education has been placed among the top priorities of the Government of Eritrea after independence. One of the objectives of the education system of the Government of Eritrea, as stated in the macro-policy document of 1994, is to make basic education (grades 1 to 7) available to all citizens (Ministry of Education, 1999). To accomplish this task the Ministry of Education (hereafter MOE) of the Government of Eritrea planned to expand and improve the provision of education.

However, this was not an easy task. There was a shortage of teachers in primary, middle and secondary schools. When the war ended the teaching staff dropped dramatically (by 52%) as the Ethiopian teachers, who were recruited by the occupying Ethiopian Government to Ethiopianize Eritreans, left the system (UNICEF, 1994). It was evident that a shortage of teachers reduced the chance of children getting an education. Thus, to replace departing teachers and meet rising demands for teachers, the Government of Eritrea was forced to hire secondary school graduates who had had no formal pedagogical training. Secondary school graduates were given a course of a few weeks, often backed up by local orientation schemes and sent to teach in primary schools around the country. This meant that the immediate problem (shortage of teachers in elementary schools) was minimized by the rapid deployment of unqualified teachers. It was necessary to appoint unqualified teachers because there is only one regular teacher training institute mandated with the responsibility of preparing teachers for the elementary school system (MOE, 2001b). The normal output (about 450 trainees at a time) of the teacher training institute, which was established in 1981 (World Bank, 1994) has been insufficient to keep pace with the rapid growth of school enrolment.

Unqualified teachers have major limitations in performing their task. Their incompetence may reduce the quality of education that children get. Where teachers' own education is limited, they lack the confidence, knowledge and skills to teach much more than they were themselves taught, or to teach in a different way. This may

reduce the quality of education children get. This is true insofar as the quality of teaching defines the quality of education. Teachers who are well trained are able to transfer knowledge and skills to their learners effectively.

The linkage between teacher effectiveness and learning effectiveness has been documented (Fullan, 1991). Klinzing, Tisher & Lewin, cited in Thair & Treagust (2003), assume that the quality of education in schools is linked directly to the professional development of teachers in the areas of subject knowledge and teaching methodology. Creemers (1994: 6) notes, while there are a number and different variable factors in classroom effectiveness, "the most important component is the teacher." From Creemers's argument it becomes clear that teachers need to have adequate subject mastery and pedagogical knowledge so that pupils are able to get the necessary knowledge and skills.

With regard to the importance of teacher effectiveness, Galton (1995: 141) argues that "the pedagogical knowledge of teaching" should be given greater prominence in the professional development of teachers. However, Lockheed (1993) considers both subject matter knowledge and pedagogical skills as determinants for effective teaching. Husen, Saha & Nooan (1978), in a review of thirty two research studies examining the relationship between the quality of teaching and learning, concluded that trained teachers make a difference. Teachers' qualifications and experience were found to be positively related to student achievement. Lockheed (1993) states that studies from developing and developed countries show that there is strong positive effect of teachers' subject matter knowledge on student achievement.

Indeed, no education system can be effective without competent and adequately trained teachers for teachers play a great role in the implementation of various educational policies and programmes.

The shortage of qualified elementary school teachers was not the only problem that the education system of Eritrea faced after independence. The departing Ethiopian employees in the MOE also caused a shortage of school principals. As a result, school principals with little previous training were appointed. It can be noted that competent and well-trained principals can assist teachers who are not sufficiently trained by

sharing their experience. However, the appointment of inadequately trained principals exacerbated the crises in the education system after independence.

In view of this, the MOE introduced a programme of in-service training (hereafter INSET) in 1993 to give as many of the unqualified teachers as possible the chance to upgrade their qualifications in the summer holidays (July-August). To date, the number of qualified elementary school teachers has increased from 42.7% in 1992/1993 to 70.5% in 2000/2001 (MOE, 2001a). It can be said that the improvement of teachers' qualifications is the result of INSET programmes.

INSET for unqualified elementary school teachers in Eritrea is a programme that offers formal certification for those who successfully complete the programme. The Department of Research and Human Resources Development is one of the three major constituent organs of the MOE that manages, among other tasks, the development of human resources in the education sector. Teacher education also comes under the operational management of the Department of Research and Human Resources Development (MOE, 2001b). The Human Resources Development, which is one of the divisions of the Department of Research and Human Resources Development, recognizes end-of-course examinations for the award of qualified teacher status, leaving course design and content to the Asmara Teacher Training Institute. Thus, the courses that are given in the INSET for unqualified elementary school teachers are syllabus-based and are prepared in accordance with the curriculum of the Asmara Teacher Training Institute. This means that the contents of the courses offered are similar to the pre-service courses, except for the duration of the programme.

The trainers for INSET for unqualified teachers are not from the Asmara Teacher Training Institute staff, but secondary school teachers who are specialized in various social and natural science subjects. They are selected by the Human Resources Development based on their competence, qualifications and experience.

The rationale to do research on "An Evaluation of the INSET Programme for Elementary School Teachers in Eritrea" is to investigate the perceptions of the trainees and trainers who attended the INSET that was held during the 2000/2001 and 2001/2002 summer holidays.

1.3 Theoretical framework

Greenland, cited in Somers & Sikorova, (2002), identifies four categories of INSET that exist internationally:

- INSET for the initial training of unqualified teachers (mainly certification courses).
- INSET for upgrading teachers with inadequate qualifications.
- INSET to prepare for new education/management roles.
- Curriculum related INSET (mainly courses linked to planned curriculum change or *ad hoc* refresher courses).

The first category of INSET programmes is directed at unqualified teachers in need of certification. This is based very much on the understanding that the government has to assume the responsibility of ensuring the quality of education that it provides. Thus, the government has the responsibility to ensure that the teachers have at least the basic capacity to provide this service.

Programmes that fall under the second category aim to improve the professional qualifications of teachers. This kind of INSET brings direct benefits in the form of a salary increase, and opens further avenues for upgrading and training (Bot, 1996).

Programmes falling in the third category are aimed at teachers in promotion posts, or teachers who wish to retrain for teaching at a higher level, on another subject. These programmes are also offered to those who wish to expand skills within a particular subject, or at management staff; and generally involve the learning of skills or knowledge for the new position.

The fourth category of INSET programmes aims at improving curriculum implementation, the quality of how a subject is taught and teachers' 'expertise'. Furthermore, curriculum related INSET aims to update or expand the teacher's subject knowledge and approach to the subject (Bot, 1996).

The present study focuses on INSET for unqualified elementary school teachers in Eritrea.

In evaluating INSET for unqualified elementary school teachers in Eritrea, the 'Ideal Model Evaluation Strategy' developed by Hofmeyr & Pavlich, (1987) has been adopted. The model is a theoretical construct of a set of core elements, which reflect those issues and aspects of INSET that have been supported by international evidence. Pavlich, cited in Hofmeyr & Pavlich (1987), identifies the following core elements of INSET:

- the INSET programme should be based on a needs and priorities analysis and directed at a specific target group.
- the INSET programme should contain a clear statement of objectives which describe what the programme is designed to achieve and there should be a logical connection between the intended goals, content, process and outcomes.
- the programme should be learner-centred and democratic. A top-down approach should be avoided so that the trainees are not passive recipients.

Hofmeyr & Pavlich (1987: 87) further suggest, among others, the following areas that need some consideration in providing INSET:

- the programme should avoid disincentiveness, like inaccessible INSET centers.
- the method of teaching used in the programme must be suitable for adult learners. The lecture method and rote learning should be avoided.
- the programme should offer recognition and incentives such as financial, academic or professional rewards.

Equally important, INSET for upgrading teachers' qualifications should, to a large extent, meet the following criteria (HSRC Report, 1990, cited in Seakamela, 1993):

- raise the effectiveness of teachers.
- lead to the acquisition of a higher qualification to improve the teachers' salary and chances for promotion, and
- be relevant to the school situation.

1.4 Purpose of the study

The main aim of the study is to evaluate the effectiveness of INSET programme for unqualified elementary school teachers in Eritrea.

Evaluating a programme has many advantages. It is seen as a means of utilizing feedback strategies for the purpose of improvement. Evaluating a programme helps:

- to identify the programme's strengths and weaknesses. This includes determining if the programme is meeting the learning objectives, the quality of the learning environment, and if transfer of training to the job is occurring.
- to assess whether the content, organization and administration of the programme (including the schedule, accommodation, trainers, materials) contribute to learning.
- to determine the extent to which trainees have changed as a result of participating in the training programme. That is, have trainees acquired knowledge, skills, attitudes, behaviour, or other outcomes identified in the training objectives.

Thus, the study attempts to

- provide an interpretation and conceptual clarity of INSET.
- examine the existing INSET programme for unqualified elementary school teachers in Eritrea.
- investigate the perceptions of the trainees, trainers, school principals and Director of Human Resources Development on the INSET for unqualified elementary school teachers.
- explore how INSET for unqualified teachers can be improved.

1.5 Research questions

To address the above aims, answers were sought to the following questions:

- What is the current status of INSET in Eritrea?

- What perceptions of the INSET programme for unqualified elementary school teachers do the trainees, trainers, school principals and the Director of Human Resources Development hold?
- Did the trainees change as a consequence of the INSET?
- What factors constrain the implementation of INSET for unqualified elementary school teachers in Eritrea?
- How can the INSET for unqualified elementary school teachers in Eritrea be improved?

1.6 Significance of the study

The importance that the Government of Eritrea attaches to the INSET programme, as a means to aid the realization of quality of education, is worthy of note. In addition, a great deal of investment, in terms of personnel and material resources, has been put into INSET. How well the INSET programme is perceived by participants, particularly trainees, trainers, school principals where trainees are working and programme director, is crucial. It is obvious that conclusions about programme effectiveness are based on the cumulation of findings and not on one study, and an evolving pattern of diversified studies rather than a single focused trial is often recommended. Nevertheless, the information collected will give insight into the impact of INSET in the trainees' work. The information gathered could also be used to reflect on the strengths and weaknesses of the INSET for unqualified elementary school teachers. The future planning of INSET for teachers by the Human Resources Development would hopefully take in to account some of these findings.

1.7 Scope of the study

The study was restricted to those unqualified elementary schoolteachers who attended the INSET courses during the 2000/2001 and 2001/2002 summer holidays for the purpose of certification. Out of the six administrative zones of Eritrea (Debub, Maekel, Northern Red Sea, Southern Red Sea, Anseba and Gash-Barka), data were collected from trainees working in two zones, namely Debub and Anseba. These zones were

selected as research sites, as the researcher was able to get access to the trainees working in these zones.

1.8 Limitation of the study

The major limitation of this study was a time constraint. According to the school calendar of the MOE of the Government of Eritrea, the first semester final examinations for the 2002/2003 academic year were given in the fourth week of January. During this time, it was not possible to interview teachers because they were finalizing the semester work. This was followed by 10 days of semester vacation.

The study did not include visits to training centres because there was no training while the data collection took place. Thus, a more limited approach was adopted. The description of the training centre (venue) was based on the perceptions of the trainees. Moreover, it was not possible to involve a large number of teachers because many the teachers who participated in the INSET for unqualified elementary school teachers work in remote schools to which it was not possible to get transportation.

In trying to determine whether the INSET trainees have undergone certain changes due to the INSET programme, it would have been preferable to report on the characteristics of the trainees before they began the INSET for unqualified elementary school teachers. The alternative was to carry out an 'objective' comparison between those who took the INSET courses and those who did not. This was not done due to time constraints. The data that indicate whether the INSET trainees have shown any change or improvement as the result of the INSET come only from the perceptions of the INSET trainees themselves and the principals of the schools where the INSET trainees are currently working.

Despite these limitations, it is hoped that the study provides valuable information about the INSET for unqualified elementary school teachers in Eritrea.

1.9 Layout of the mini-thesis

The study is made up of five chapters. Chapter one has focused briefly on the background information of Eritrea's education system before independence. The problems that the Government of Eritrea faced in providing qualified elementary school teachers after independence are discussed. The chapter further focused on the purpose, limitations, significance and scope of the study. The literature review chapter deals with various definitions of INSET, aims of INSET, a critical overview of INSET in other countries, as well as modes of delivery of INSET, and the evaluation of INSET. Chapter three looks at the methodological issues involved in the study. Chapter four deals with the presentation and analysis of data as an attempt to answer the research questions. Moreover, the findings of the study are discussed in this chapter. The last chapter provides a conclusion and makes recommendations focusing on the research findings.



CHAPTER TWO

LITERATURE REVIEW

In order to place the study in a wider context, this chapter deals with a review of relevant literature with regard to the definition of INSET, aims of INSET, the role of INSET in teacher training and upgrading in different countries, modes of delivery of INSET and evaluation of INSET.

2.1 Definition of INSET

Various researchers use different terms to describe the type of training teachers receive. Some refer to it as in-service education; others as in-service education and training (INSET); staff development; and professional development. Staff development and professional development relate more to the idea of lifelong learning where teachers and other school staff can develop their professional competence, personal education and aspirations and general understanding of their changing roles and tasks. This can be done through guidance and training while on the job, and programmes undertaken away from the school settings.

INSET has been variously defined. The definition of INSET depends on the emphasis that is placed on it, and in terms of its design or plan. INSET includes aspects like upgrading teachers' skills and knowledge without a change in role; preparation for new roles and positions; improvement in qualification and status and focus on pedagogical needs. In this section a few important definitions of INSET are discussed.

Although it was written long ago, Cane (1969: x) gives a purposive definition of INSET:

In-service training is taken to include all those courses and activities in which a serving teacher may participate for the purpose of extending his professional knowledge, interest or skill. Preparation

for a degree, diploma or other qualifications subsequent to initial training is included within this definition.

This definition was proposed as the outcome of a major survey on the views and preferences of educators relating to INSET undertaken by the National Foundation for Educational Research (NFER) in England and Wales. This definition presupposes that INSET activities should be planned deliberately to effect specific changes that eventually result in improving teachers' performance in schools.

Morant (1981:1) defines INSET as "The education intended to support and assist the professional development that teachers ought to experience throughout their working lives." From Morant's definition it follows that INSET has to be given to teachers starting from the time they enter the teaching profession and continues to their retirement.

A useful definition is that of Thompson, as quoted by Van Niekerk (1995: 4), who views INSET as:

The whole range of activities by which serving teachers and other categories of educationalists (within formal school systems) may extend and develop their personal education, professional competence and general understanding of the role which they and the schools are expected to play in their changing societies. INSET further includes the means whereby teachers' needs and aspirations may be met, as well as those of the system in which he or she serves.

This definition is broad and includes all forms of continuing education for serving teachers, whether they are formal or informal activities, and whether they constitute personal or professional education.

Dunkley, as cited in Murphy (1985: 6), defines INSET as "All those planned activities teachers undertake to improve their instructional effectiveness, personal and professional knowledge and skills to equip them for new or changed roles." This implies that INSET activities are planned so that a wide variety of events that could happen accidentally or in the way they were not planned are eliminated. Moreover, this definition encompasses the need of INSET for those teachers who are chosen for a new job or position of responsibility. Diamond supports Dunkley's definition of

INSET. According to Diamond (1991: 46), INSET is defined as “Any activity usually deliberate and formalized, whereby teachers working beyond pre-service years may upgrade their professional understanding, skills, and attitudes to broaden their perspectives.”

Lawrence (1995: 2) defines INSET as “The professional development of teachers and teacher educators already on the job, a process of education combined with experience by which teachers reflect on their work, deepen their knowledge and improve their effectiveness.” Aitken (2000) echoes the definitions given above by saying that INSET is an activity aimed more specifically at identifiable learning activities in which practising teachers participate.

The literature on INSET indicates that the ultimate purpose of INSET is to bring about, in addition to teachers’ professional and personal development, an improvement in the quality of the learning of the learners. It is argued that the fundamental rationale of INSET is not related only to teacher quality but also to its role as a major strategy in attempts to maintain and improve the quality of schooling. Klassen, as cited in Murphy (1985: 7), asserts this by saying, “INSET should prepare teachers and other educational personnel to be of the highest possible quality; but in the last analysis the learners are the aim.”

In his understanding, Bolam, cited in Somers & Sikorova (2002: 96), regards INSET as the personal development of teachers and the strengthening of their motivation and commitment. According to Bolam, INSET is:

Those education and training activities engaged in by primary and secondary school teachers and principals, following their initial professional certification, and intended mainly or exclusively to improve their professional knowledge, skills, and attitudes in order that they can educate children more specifically.

A few writers on INSET stress the importance of the involvement of the whole school, including the principal, in INSET activities. With regard to this point, Harris (1980) lays great stress on the need to involve the whole school in INSET. According to Harris, INSET is any planned programme of learning opportunities offered to staff members of schools for purposes of improving the performance of the individual in

already assigned position. In this definition the reference to 'teacher' is omitted to include, according to Harris, non-teaching staff.

The significance of the definitions of INSET is that governments develop a strategy of INSET to include particular needs of teachers as they understand or think them to be. It is realized that in all its forms INSET has become an important element. By improving the competence, knowledge and professional skills of teachers, INSET raises the quality of education learners ought to achieve.

2.2 Aims of INSET

Educators state various aims of INSET. The following are some of the most important ones that have been identified in the literature survey.

2.2.1 Educating teachers to serve as change agents

Historically, teachers have been regarded as agents of educational change, and INSET is considered as the major vehicle for delivering educational changes. It is the means for helping teachers to implement change.

The literature of change theory contains in great numbers the assumption that change is a painful process (Fullan, 1991). Fullan goes on to say that the initial stages of any significant change involve anxiety and uncertainty. Similarly, Diamond (1991) states that if there is anxiety and threat, no change is likely to eventuate. The resentment and resistance that teachers feel towards external attempts to impose change is compounded when no discussion or collaboration takes place. Ongoing technical and psychological support is crucial if the anxiety is to be coped with (Fullan, 1991). Emphasizing the need for INSET in enhancing change, Easen (1985) comments that imposed change itself will not be successful, unless the process of personal change is also considered. Even those teachers who are willing to implement change, however, must be given the support to do so. Without sufficient re-training, even teachers initially enthusiastic about an innovation or change can become frustrated by problems in implementation and eventually turn against the project.

Teachers play a great role in enhancing the successful implementation of change. At the end of the day, it is the teachers who determine whether innovations that have been adopted through top-down measures will eventually be carried out inside the classroom. In describing the role of INSET in effecting change, Bagwandeem & Louw (1993) remark that INSET has, to a great extent, become the key instrument for bringing about planned change in education. Dulin & Rust, as cited in Tarrant & Newton (1992), also stress that INSET, especially school-based INSET, can facilitate the effectiveness of promoting change from within and foster commitment and ownership. They further note that the resistance to change in education can be reduced by informing and educating teachers as early as possible with regard to the necessity for proposed change by offering relevant INSET programmes for teachers.

In a similar vein, Theron (1996: 140) says "To change some thing, some one has to change first." Theron's statement implies that the ultimate effectiveness of change implementation depends on whether teachers and other educationists change in order to incorporate new practice. Hall & Oldroyd (1991: 25), hold a similar perception. According to them, "Whenever teachers are asked to behave in a different way, they must change what they know, what they believe, what they can do and what they actually do." It can be argued that effective implementation of change in education is ensured only when teachers are given training from time to time.

The suggestions and arguments given above imply that many education systems offer INSET for teachers and other educators in order to facilitate the implementation of change in areas they consider in need for improvement.

However, change is hardly achieved only as the result of a management plan and/or government legislation. Successful change only occurs when teachers believe in the need for it, know where it is going, are committed to it and have some ownership of it. Moreover, successful change occurs when teachers are prepared to initiate and implement change.

2.2.2 Assisting teachers to adjust to changing conditions

As indicated above, knowledge is expanding all the time. It becomes evident that teachers need to learn something new to adjust themselves to the new innovations regardless of their qualifications and experience. Masoner, quoted by Murphy (1987: 31), emphasizes this:

We live in a time in which change is a major force affecting all aspects of our lives. Our world of today, as well as our world of the future, demands a new and improved kind of education to meet the challenging needs and problems not in existence even a few short years ago. Hence it is incumbent on those of us who compromise the education profession, in cooperation with other interested and concerned individuals and groups, to undertake the task of developing new and improved programmes for the preparation of those who serve in schools as teachers, administrators and educational specialists.

Aitken (2000) stresses the need of INSET to enable teachers to develop new skills and capabilities to respond to a wide range of demands and gives brief descriptions on mainly economic, social, educational, government policy and the use of information and communication technology in learning as follows:

- economic: economic globalization is leading to the need to raise educational standards in order for countries to be internationally competitive.
- social: changes in society are influencing students' home and family environment and this means it is not always possible to address students' educational needs without considering their social needs and cultural identity.
- educational: educational research continues to reveal new insights about teaching and learning which teachers need to incorporate in their teaching practice.
- use of Information and Communication Technology (ICT): the effective use of ICT in schools has the potential to enhance teaching and learning, but only if teachers are adequately trained.
- government policy: schools and teachers need to respond to recent reforms in educational, administrative, curriculum and assessment.

Murphy (1985) lays great stress on the need for INSET for teachers on the assumption that by adopting different modes of teaching, it helps them to come to terms with the rapid changes taking place in society and enables them to meet the challenges of the technological age.

INSET is increasingly important for all teachers. INSET may be particularly important for those teachers who take a mid-career break to raise families; INSET may be seen an essential prerequisite for their return to teaching. Quoting McNamara, Simons & Stanford (1986: 99), point out the need for INSET for re-entrants to teaching. According to them “If returnees are to be adequately prepared to face the challenge of teaching in contemporary schools, then the scale of the re-training programme provided for them should be comparable with those provided for current initial teacher training programmes.” Bagwandeem & Louw (1993: 48) state the need for, in their words, “positive re-training” to update methods of teaching and subject matter of teachers who may be returning to classroom after a period of absence from teaching. Bagwandeem & Louw also suggest INSET for teachers to update their knowledge and skills to adjust themselves when they are forced to teach a level or subject with which they are not fully familiar.

2.2.3 Contributing towards the academic and professional development of teachers

Teachers’ work is becoming complex and demanding. Bagwandeem & Louw (1993), argue that the myth that initial (pre-service) training can equip a teacher for a lifetime career has now been exploded. It is an acknowledged fact that initial training only equips teachers to start out on their careers and that it is only after they have gained some experience from the work place that they can benefit fully from INSET programmes. Thus, even a well structured initial training package cannot and does not prepare the teacher fully for the professional challenges he/she is to face from his/her first day as a teacher throughout a full teaching career (Thompson, 1981 and Mills, 1985). Johnston (1971) remarks on the inadequacy of pre-service training and the need for INSET in that the bank of knowledge a teacher acquires in the pre-service training is insufficient to sustain him/her throughout his/her professional life. Johnston

cautions that it is an undeniable challenge to teachers to keep pace with the knowledge bursting at a rate that has never happened before and suggests that new thinking and ideas in education need to be introduced to teachers.

In a similar vein, Sikorova & Somers (2002: 96) posit that, "... teachers' professional education does not finish at the end of pre-service training. Qualification and pre-service training alone do not make a teacher competent in a rapidly changing world." Pre-service training provides only, in the words of Hofmeyr, De Wee & McLennan (1994: 14), the "coat hanger on which INSET ideas are hung."

INSET is an activity needed in the teaching profession because neither the content of knowledge nor professional skills is static. Knowledge is expanding all the time and the theory and practice of teaching is changing. In a study conducted to investigate the influence/impact of two part-time INSET programmes offered to teachers at the University of Stirling in Scotland, Bill & Peters (1992), found that INSET had helped even those teachers who were successful in their work. The finding of their study indicates that INSET not only broadened the teachers' understanding of education, but also increased their professional lives, making them resourceful in a new situation. Thus, INSET is highly essential for teachers to develop their academic and professional competency. Murphy (1987) recommends INSET even for those teachers who are successful in their work in order to be more successful professionals. Chan, Fung & Carr (2002), make a similar remark. According to them, even qualified teachers who have already acquired the basic knowledge, understanding and skills of teaching, and considerable experience from their career experience, still need planned INSET programmes in order to accelerate their professional growth.

The fundamental assumption that underlies the aim of INSET is that improving the knowledge and skills of teachers ensures quality teaching. This, in turn, improves the quality of education that pupils receive.

However, INSET that is insufficiently related to the specific needs and concerns of the INSET participants tends to offer 'theory' which is unrelated to practice. It becomes ineffective in influencing teacher performance and school improvement. Based on his

review on INSET activities, Fullan (1991: 316), considers the following, among others, as reasons for failure of INSET:

- INSET programmes rarely address individual needs and concerns.
- The majority of programmes involve teachers from many different schools, but there is no recognition of the differential impact of positive and negative factors within the systems to which they must return.

Fullan (1991) also points out that even courses that are very stimulating and contain many valuable ideas may be difficult to use if there are no convenient resources at schools. It is argued that for INSET programmes to be effective, they should focus on the real needs of teachers and availability of relevant resources at schools.

The teaching methods that INSET trainers use at INSET centres also contribute to the success or otherwise of INSET activities. INSET trainers should apply various teaching activities that involve learners because learners learn more when they actively participate rather than passively follow what their trainers say. Trainees themselves must experience the enquiry approach in their own learning in order to be able to use the method in the classroom.

With regard to this point, Harber (1997: 62) notes “The habits picked-up in teacher training days stay with trainees and form a considerable foundation for the behaviour of returnee teachers in the classroom.” In writing about the legitimate aim of INSET, Chisholm, Kearney, Knight, Little & Morris (1987), stress the importance of using different teaching methods for INSET programmes. Thus, the use of more democratic and cooperative teaching methods at INSET courses would help to facilitate the greater use of these in class.

Despite the advantages of participative methods of teaching, it can be argued that the availability of resources and classroom situations (large class size) may result in choosing a method that is not preferred pedagogically. Mohapeloa (1982) expresses doubts whether INSET programmes will achieve the desired results. According to Mohapeloa, unfavourable conditions such as acute shortage of resources in schools, poor classroom conditions brought about by insufficient resources de-motivate

teachers. Consequently, these teachers always find themselves teaching in the same way that they have done before engaging in professional development activities (Briscoe, 1991). Improving teachers' working conditions is, therefore, essential in facilitating the success of what is learned in INSET.

2.2.4 Preparing teachers to meet legal requirements

One of the aims of the introduction and implementation of INSET is to meet the expectations of government bodies. With regard to this aim, Murphy (1985: 16) states, "A stated aim of INSET is that of raising the standards of the teaching profession with regard to the legal requirements and certification."

In most developing countries teachers are either unqualified or underqualified. Thus, INSET programmes are used to upgrade teachers so that they can become legally qualified in terms of the conditions of service determined by government legislation (Bagwandeem & Louw, 1993).

In developed countries the concept of legal requirement seems to differ from one country to another. Bagwandeem & Louw (1993) indicate that to attend INSET courses is not compulsory in the United Kingdom, which is a developed country, although the Government stresses the importance of these courses. In the United States of America, on the other hand, teachers are only granted a license to teach after they demonstrate teaching effectiveness in an INSET course. In South Africa, which is both a 'first-world' and 'third-world' country (Murphy, 1985), the South African Council of Educators (SACE) is responsible for the registration of educators (Mashile & Vakalisa, 1999). According to Mashile & Vakalisa, without a valid license from SACE, the Department of Education will not employ a teacher. Mashile & Vakalisa further point out that practising teachers who are struck off SACE's roll will immediately face dismissal from the Department of Education. A teacher who has failed to fulfill the criteria of SACE has to re-register periodically with SACE and he/she has to submit proof that he/she has participated in some INSET activities.

In Germany, INSET is seen as a highly desirable means of obtaining better status, salary, promotion and upward mobility. In the United States of America, unique qualifications are necessary for those who wish to become superintendents of schools, principals, psychologists, and so on (Bagwandeem & Louw, 1993). The rise of the entry level of teaching in Australia, which has a fully qualified teaching force, has caused a large number of in-service teachers to feel that their promotion may be blocked unless they raise the level of their qualifications (Perraton, 1993).

2.2.6 Supplying teachers for the education system in developing countries

The World Education Report indicates that in the 1960's and 1970's there was considerable expansion of education in most regions of the world and there was a widespread shortage of teachers, especially in the newly independent countries (UNESCO, 1998). This is necessitated by the fact that inherited systems of teacher education have been unable to satisfy the high output called for by commitments to universalize primary schooling (UNESCO, 1997). To meet the demand of teachers, the countries were forced to employ a high proportion of untrained and unqualified teachers.

Quality matters as well as quantity. To accept unqualified teachers in schools has a negative impact on the standards of teaching and learning. It is difficult to expect quality education from education systems where many of their teachers are employed without obtaining training in the pedagogic aspects of teaching. The academic knowledge acquired by studies for matric also has a slight relevance for the subject knowledge necessary for teaching at primary level. To do their job, teachers need to possess a mastery of the subject matter they are to teach and to be skilled in the process of teaching. In light of this, governments of the developing countries offer INSET for the untrained and unqualified teachers in order to equip them with the necessary skills and knowledge. Murphy (1987: 26) asserts, "There is a consensus that in Africa and many countries in South America and Asia the supplying of teachers for the education system could be effected by means of INSET."

Thus, INSET is considered as an effective means of solving the problems of poorly qualified teachers in countries where enrolment is exploding and attempts are made to eradicate illiteracy and to offer every citizen a basic education.

Besides introducing INSET for the purpose of improving the qualifications of teachers, who are employed to solve the shortage of teachers during the explosion of enrolment, many countries seem to be placing more emphasis on INSET courses as the main means of teacher training. The conventional pattern of teacher training, based on an initial pre-service full-time course, is becoming less prevalent. The explanation given for the move towards INSET is that INSET is regarded as economical in terms of time, money and other resources. Hofmeyr, De Wee & McLennan, (1994), argue that INSET is more cost-effective than lengthy pre-service training.

2.2.7 Combating 'Burnout'

It is believed that teachers are leaving the profession not only because they cannot survive on their salaries but also because there are no proper conditions in which to practise their profession. Straker (1991) states that lack of recognition, lack of prospects, and a perceived devaluing of the profession by society are some of the factors that make teachers leave their profession and seek alternative careers. Educationists believe that the professional status of teaching does not improve merely by expanding the base of knowledge and skill of teachers but also by improving the school settings (Murphy, 1987). The lack of proper conditions in the school settings is causing stress amongst teachers. Bagwandeen & Louw (1993) list some of the factors that contribute to teacher stress:

- low esteem and lack of appreciation by the public.
- excessive paper-work, which limits pupil-teacher-parent interaction.
- unreasonable loads, large class size and accompanying problems of discipline.
- the censorship of content, text-books and methods which threaten teacher's intellectual integrity, creativity and freedom of mind.
- the treatment of teachers as executors of somebody else's orders rather than as professionals capable of making educational decisions.

Modernization in educational systems seems to affect teachers. Teachers who fail to cope with the demands of education in the modern era are likely to show frustration, exhaustion and finally 'burnout'. Likewise, if teachers who are trained in modern methods with latest knowledge and skills are required to work in situations where they cannot use their knowledge and skills, they are likely to be disappointed and finally become ineffective. In such situations, INSET activities may serve as opportunities where teachers discuss their problems and seek possible solutions.

Christiansen, as quoted by Murphy (1987), suggests the best learning environment is one that not only meets the needs of the students, but also an environment in which the teacher receives emotional and administrative support.

From the foregoing one can conclude that INSET programmes should not only help teachers to keep up with the profession (as explained in 2.2.3) but also should include the means of combating 'burnout'. INSET should also provide opportunities of a sense of personal renewal, continued confidence and developments in various fields of study. Teachers are responsible for learners, and society should also show at least some interest in, and where possible, some appreciation of what they are doing. However, for INSET to be effective governments must give incentives/rewards to teachers who participate in INSET.

The literature on INSET highlights the importance of incentives/reward in effecting the aims of INSET programmes. Teachers are unlikely to undertake further formal or informal studies without some form of incentives/reward. Given the importance of INSET and of teachers in the education of learners, incentives/reward are required to motivate teachers. Mashlie & Vakalisa (1999) assume that teachers, of their own will, would not be interested in INSET programmes if there are no incentives/reward attached to them.

Hartshorne, in Hofmeyr, De Wee & McLennan (1994), suggests that teachers who participate in INSET can be rewarded by means of salary increments, certificates, special grants and promotion. Niven, in Murphy (1985), stresses the awarding of certificates after successful completion of INSET courses. Immediate salary increment for teachers who complete INSET courses may be difficult for some poor countries. In

proposing a mechanism that could enhance participation in INSET activities in South Africa, Mashile & Vakalisa (1999) suggest an alternative incentive. According to them, accreditation of INSET can motivate teachers to follow INSET programmes designed to meet both their needs and the needs of the institution. With regard to the realization of this incentive, Mashile & Vakalisa (1999: 96) suggest, "Credits obtained in INSET programmes would of necessity count towards admission to higher education programmes that even may lead to higher degrees such as masters or doctorate." They conclude their argument by stressing the positive impact that accreditation could have on teacher development.

A convenient INSET centre is another factor that could motivate INSET participants. Murphy (1987) points out that an inconvenient INSET centre is a major disincentive. INSET provision requires an effective physical base for organizing INSET activities. In the literature there seems to be little agreement about the most effective physical base for INSET. In Africa, teachers' centres of education, colleges of education, mobile units, universities and centralized staff training colleges are used as INSET centres (Hofmeyr, De Wee & McLennan, 1994).

2.3 INSET in other countries

Educationists in many countries have recognized the need for INSET. The scope of INSET is continuously growing. The number of teachers participating in INSET activities and budgets allocated to these activities are growing. An explanation for the rapid growth of INSET activities in many countries could be that INSET improves the quality of education. There is sufficient evidence to suggest that INSET has been relied on (in some countries) to perform a pre-service function (Ashton, Henderson, Merrit, & Mortines, 1983). This is necessitated by the fact that the teaching profession, unlike others, often recruits into its ranks people who lack the necessary qualifications or whose qualifications fall below the required minimum level. It is also true that INSET structures assume different roles in different countries depending on the individual needs of the various educational systems.

This section while in no way attempting a comprehensive review delineates some of the common areas of emphasis of INSET in some selected countries. Some of the countries selected are developed while others are developing. It is hoped that the INSET practices and experiences in the countries described here will help in understanding the status of INSET in Eritrea, which is a developing country.

The Zimbabwe Integrated Teacher Education Course (ZINTEC) is one of the recent programmes aimed at addressing the problem of untrained teachers in Zimbabwe. Like many other African countries, the Zimbabwean Government embarked on massive education expansion after independence in 1980. The Zimbabwean authorities found themselves with the following problems:

- the reopening of schools that had been closed because of the war and the construction of new ones,
- providing for the educational needs of about 300 000 children who returned to Zimbabwe after independence, and
- finding teachers to staff the expanded schools (Bray, Clarke, & Stephens, 1986: 163).

Against this background, the Government was forced to recruit many untrained people into their schools. The number of untrained teachers increased from 6000 in 1980 to 14 000 in 1981 and 27 000 in 1983 (Bray *et al.*, 1986). It was impossible to produce teachers to meet the needs of the education system through conventional teacher training. A more innovative model was therefore adopted.

The ZINTEC models combined residential and distance learning in an attempt to provide a teacher training system that was rapid and effective. Five ZINTEC models were established in each of the country's main regions (Bray *et al.*, 1986).

To be admitted into the ZINTEC programme, a student was expected to work for at least one term in a registered primary school (Bray *et al.*, 1986).

After being admitted into this programme, the students received intensive training for about 16 weeks at the college centre. This initial training provided the students with a

“survival kit” for use in schools for the following three years. During the three years in the field, students would continue their study of Education Theory through distance learning. Their teaching was also under constant supervision by field tutors. They were also required to attend a three-week vacation course after two terms. After teaching for three years, the student would return to their colleges for the last sixteen weeks of their training. It is during this time that they would review and discuss their field experience before sitting for their final examinations.

Like many developing countries, Nigeria has recognized the need of INSET to meet its human resource and societal needs since 1967 (Perraton, 1993). At that time the National Teachers' Institute (NTI) was set up to provide training for the large number of teachers needed for universal primary education. Its students are mainly teachers already working in schools but lacking formal teaching qualifications. According to Esu (1991), INSET in Nigeria is designed to serve many purposes. It can introduce teachers to new subjects, such as social studies, guidance and counseling, special education and the new 6-3-3-4 system of education and its curricula. Esu further states that the emphasis, however, is on the improvement of instruction when there are deficiencies in skills and knowledge of teachers as well as the encouragement of teachers' professional advancement.

There are three main approaches to INSET for teachers in Nigeria, as identified by Esu (1991). They are:

- The central office approach: this is mainly adopted by the Government via the Ministry of Education and the National Teachers' Institute. The central office approach takes the form of workshops and refresher courses and relies on outside experts (usually university professors/lecturers).
- The long vacation (sandwich) programme: the Education Faculty/Institute of the organizing university develops this programme. It takes place during the long vacation for eight weeks each year: four weeks during the second term holidays (between July and August) then for another four weeks during the third term holidays (between November and December). The long vacation programme is designed to develop more in-depth academic work for the Associateship Certificate in Education (ACE), Bachelor of Education and Master of Education.

- The distance learning approach: This approach was developed as a direct response to the need to train teachers to meet the post-independence expansion in the educational service, which outstripped the capacity of the teacher training colleges, and to provide training opportunities to untrained and under-trained teachers by distance teaching. The programme was developed to provide access to greater numbers of teachers who could not benefit from the sandwich programme during the long vacation. The benefit of this approach is that teachers are not taken out of their work place for the period of training.

The study conducted by Esu (1991) reveals that the content of INSET in Nigeria is often derived from the perceived needs of officials controlling the education system. A needs assessment is hardly carried out prior to the INSET sessions and teachers are not involved in the planning of INSET activities. Moreover, the study reveals that the content of INSET courses for unqualified teachers is the same as the pre-service (college) courses of the university. The only difference is the duration of the programme.

In his comparative review of the use of distance education and open learning for the training and upgrading of teachers, Perraton (1993) also gives a brief account of INSET in Tanzania. A decade from independence, Tanzania resolved to achieve universal primary education. Teachers had to be found. The government recruited secondary-school leavers and trained them on the job. To improve the competence of the unqualified teachers, the Government of Tanzania adopted distance teaching (Mbunda, in Perraton, 1993). Trainees split their time between teaching in elementary schools and studying for their teaching qualification at a distance. With regard to tutors, the Ministry of Education recruited a number of college tutors on the basis of their professional and academic competence, and their sense of national commitment.

The teacher training at a distance has six elements:

- correspondence courses: where trainees study courses mailed to them by their local tutors
- face-to-face tuition: where contact sessions are held in local training centres
- radio and cassette programme

- teaching: where trainees were expected to undergo practical teaching experience
- residential courses: this is a six-week residential programme in teachers' colleges where trainees review what they had learnt in three years. During this period, trainees sit for written examinations for their certification.

In the Czech Republic, according to Sikorova & Somers (2002), INSET is mainly organized by regional Methodology Centres. These centres offer courses, seminars and workshops accredited by the Ministry of Education to unqualified and qualified teachers. INSET teacher trainers, university educators, mentors or other experts hired by the Methodology Centres teach INSET courses. The length of courses varies. Some courses last for ninety minutes while others last longer. Courses for unqualified teachers are usually longer; they can take one or two years.

Sikorova & Somers (2002) further state that unqualified teachers who have attended recognized courses run by the Methodology Centres are often required to obtain a university degree. Therefore, these teachers apply to universities that offer distance education learning programmes or programmes for part-time students. New distance learning programmes are also given to qualified teachers and head teachers by universities. Most programmes are, however, called 'combined' in that they combine distance self-study with compulsory lectures, seminars and tutorials that teachers are required to attend.

In the Czech Republic, INSET is offered not only for unqualified teachers for the purpose of certification, but also to other qualified teachers when the content of some subjects have been revised or completely changed and when new subjects are introduced. It is argued that such changes in curriculum could not be introduced without new qualifications and training.

In Japan, the provision of INSET began in 1949 (Lamie, 1998). The major types of INSET activities implemented by the Ministry of Education, as listed by Lamie (1998), are,

- Lecture and group discussion in English, which is given to teachers' consultants, junior and senior high school teachers, to improve participants' communicative

ability and skills in instruction.

- Training in management and administration and classroom teaching. This type of INSET is given to school principals, vice principals and middle level teachers.
- General overseas programme: this type of INSET is offered to teachers to experience education and culture in an average of ten countries in Europe, America or Australia.

Besides the formal INSET opportunities organized by the Ministry of Education of Japan, there are numerous organizations and study groups initiated and organized by the teachers themselves. In some cases, all the teachers of a region become members of training and study organizations and participate in their activities, which include annual conferences, school visits, study groups and development projects.

Another type of INSET is the alumni organization of teacher training institution whose centres are usually what are known as the 'attached schools'. The activities conducted in these training institutions are meant to provide teaching practice for student teachers and research material for college faculties.

Non-governmental associations such as the Japan Association for Language Teaching (JALT) present the third type of INSET. JALT focuses on the improvement of language teaching and learning in Japan.

From the information given above, it becomes clear that there is a variety of opportunities open for teachers in Japan to take part in INSET activities.

According Hall & Hofmeyr (1999), since 1976, INSET provision began to develop rapidly as non-governmental organizations (NGO's) tried to improve the quality of Black education in South Africa. Most of the non-governmental organizations attracted local private funding and foreign grants. Hall & Hofmeyr indicate that the Government of South Africa also attempted to address the huge problems of under-qualified and unqualified Black teachers through INSET programmes. By the 1990's INSET provision by both the state and NGO's was considerable. Recently, a new type

of INSET provider, private for profit colleges, has entered the field, with most of them providing distance education.

Today INSET for upgrading and further qualifications is a huge industry in South Africa. The majority of the teachers involved in this type of INSET are under-qualified and unqualified and are upgrading their qualifications. School-focused INSET that is not usually accredited is also offered in South Africa. This type of INSET is related to school competence and usually involves curriculum related or management training.

2.4 Modes of INSET

The literature on INSET shows that there are various ways in which INSET activities are provided for teachers. INSET courses may take the form of a training session that may involve individuals in many activities. These activities may be job related, they might be school-focused or even directed towards the acquisition of qualifications (Bagwandeen & Louw, 1993). Some of the ways by which INSET activities can be delivered will now be considered briefly:

2.4.1 School-based INSET

School-based INSET is considered as a remedy for the failure of course-based INSET, where teachers are taken out of schools and instructed in groups. The assumption is that school-based INSET occurs physically within the school itself, the process of needs analysis would be easier, training would be closely matched to these needs, and barriers of implementation would be removed (Bagwandeen & Louw, 1993). Gaynor (1998) supports this perception. In his report on the study of INSET in selected World Bank projects in Sub-Saharan Africa, Gaynor indicates that many education officers in this region implemented many of the INSET activities recommended for teachers. However, the report indicates that many people preferred INSET activities to be organized by the schools themselves. This implies that school-based INSET is essential, based on the assumption that school-based INSET would minimize/avoid the top-down, centralized approach of INSET. Similarly, Dulin & Rust, in Newton &

Tarrant (1992), argue that school-based INSET can best illuminate the effectiveness of promoting change from within and encourage commitment and ownership.

Nevertheless, it has to be realized that a purely school-based INSET has several drawbacks. The effective introduction of school-based INSET is dependent on the existence of highly qualified leaders and/or teachers, especially those who can initially be called on to act as programme facilitators. Schools who do not have enough effective facilitators for their INSET may focus on small issues that happen in their schools and not on issues that are more important. Collegial working practices within and among schools have become popular as a means of diminishing the isolation of teachers in their classrooms (Gaynor, 1998). However, school-based INSET fails to recognize the advantages that could be obtained by involving other schools and other professional teachers. Furthermore, school-based INSET underestimates the financial problems that schools encounter in administering school-based activities. School-based INSET programmes are likely to be more efficient in large and urban schools than small and relatively isolated schools.

2.4.2 School-focused INSET

School-focused INSET is a mode of INSET that is used mainly as an orientation towards a programme that involves maximum teacher participation in its conceptualization, planning, execution and evaluation (Nixon, 1989). Nixon further remarks that school-focused INSET neither implies a conceptually rigorous strategy for INSET nor an exclusively school-based mode of delivery of INSET. The implication of this notion is that school-focused INSET could take place either on or off the job and could be provided by outside agencies or by the school itself.

Gaynor (1998) cautions against the organization of INSET by the school alone. Gaynor substantiates his argument by saying it makes sense on pragmatic and equity grounds to organize INSET at regional or central level depending on the structure, education system and geographic conditions. In writing about the organization and delivery of INSET, Robinson & Versfeld (1994: 10) emphasize, "Effective INSET requires both a centralized and participative approach." According to this view, the

state must provide resources and incentives while teachers express their needs clearly. Thus, in school-focused INSET, the school, its staff and their needs are the focus while outside agencies are needed for additional stimulus, resources and support. Thus, school-focused INSET seems to be a synthesis of course-based and school-based INSET.

2.4.3 Short courses

Bagwandeem & Louw (1993) state that the title 'short courses' is used to refer to a wide ranging set of activities that may not have much in common except the duration. These are non-awarding courses, which according to Rudduck (1981), serve a number of purposes. The primary purpose of these courses is to communicate a body of knowledge or structured set of experiences. This can be achieved by giving lectures with opportunities for questions and discussions. The second is an arena for small scale experiment where reports of studies carried out by teachers are presented and discussed; and an open opportunity afforded to teachers to define their own problems. Short courses take different forms. Some of these are single lectures, conferences, and workshops, short weekend courses, short evening courses and short courses in school time.

2.4.4 Vacation courses

Vacation courses have become a common practice in many countries, although the arrangements for such courses vary from country to country. For example, in the United States vacation courses are offered for educators in order to shorten the period required for regular students to obtain a bachelor's degree.

In the United Kingdom, vacation courses are residential and the fee for the course includes all the charges to be met during the course: accommodation, food and light refreshments, excursions and tutorials. In most cases, the employing authorities pay back some or all of the money paid by the trainees.

In Canada participation in two courses held during the summer vacation with the sitting of written examinations lead to an enhanced professional qualification for the university graduate. Vacation courses are popular in South Africa. Teachers studying by means of correspondence courses for higher professional or academic qualifications, use the vacation periods to complete practical components of the course.

2.4.5 Distance education

Distance education refers to the form of study not led by teachers present in classrooms but supported by tutors and organizations at a distance from the student. It is an educational process in which a significant proportion of the teaching is conducted by someone removed in space and/or time from the learner (Perraton, 1993).

In developing countries, teacher education institutions have been unable to keep pace with the demands of their rapidly expanding education systems (Bagwandeem & Louw, 1993). To solve such problems, some countries introduce distance education programmes for new recruits. In Tanzania and Zimbabwe, for example, new recruits to teaching were enrolled on large-scale in distance education programmes (Perraton, 1993).

More often, distance education programmes have been run for the initial training of teachers who are already in service, and therefore experienced (Chan, Fung & Carr, 2002).

Distance education has also been used for the continuing education of those teachers who are experienced and qualified but want to use it as a way of upgrading their qualifications and increasing their skills. These programmes have been more prominent in industrialized countries: as the level of qualification needed to enter the teaching profession has risen, so those already in service have demanded opportunities for continuing education in order to upgrade their own qualifications (Perraton, 1993).

Distance education as a strategy for INSET has distinct advantages. Teachers do not have to be removed from schools to attend lectures; thus the problem of replacing teachers that take part in face-to-face contact is solved. Administrators of schools are not caught between the need to have teachers upgraded and the problem of having classes left without teachers. Furthermore, teachers do not have to interrupt their earnings while they are studying in order to improve their qualifications. Large numbers of teachers can be reached and programmes brought to them where they live. As an INSET strategy this approach is flexible and effective.

Perraton (1993) considers distance education as a cost-effective mode of INSET delivery. The explanation given for this is it minimizes expenses, in part by avoiding the need for accommodation, which is needed during face-to-face contact training. The infrastructural costs are substantially lower than those of residential courses. Moreover, trainees are contributing to the economy since they are working while studying.

Despite all of these advantages of distance education, it is argued that there are several problems associated with distance education systems throughout the world. The literature about distance education cites some major constraints that are particularly relevant to developing countries.

The need for staffing in the area of distance education is felt in most education systems. Experts in this field are insufficient to meet the increased demand for their services. Many education systems experience shortage of personnel that can serve as writers or editors of tutorial packages.

The development of a two-way communication system that characterizes the didactic model of the distance education system suffers serious constraints in developing countries where the postal services are inadequate and transportation poor. Where individuals do not have radios, televisions, and other relevant technology, they cannot benefit from some of the programmes. The support of technical media is therefore severely limited.

Funding a distance education programme also remains a problem in many countries. Many education systems depend partially or totally on grants of foreign organizations or nations. The financial constraints necessarily affect planning and the effectiveness of the programme. To cope with these problems, tuition fees are charged since most students are gainfully employed. In some cases, employers and governments release funds for the training of their employees.

2.5 Evaluation of INSET

2.5.1 Definitions of evaluation

Writers have made many attempts in recent years to clarify the meaning of evaluation. To understand what the term 'evaluation' means, some definitions of programme evaluation are indicated below.

Unruh & Unruh (1984: 263) define evaluation as "An interactive process of description and judgement that discovers the nature and worth of something." According to these authors, evaluators always attempt first to describe something and then to indicate or judge its perceived merits and shortcomings. Patton, cited in Robson (1993: 175), considers evaluation as "The systematic collection of information about the activities, characteristics and outcomes of programmes." West-Burnham (1994: 158) defines evaluation as "An internal and external formative process designed to provide feedback on the total impact and value of a project or activity." Phillips (1997: 36) regards evaluation as " A systematic process to determine the worth, value, or meaning of an activity or process."

Weiss gives a comprehensive definition of evaluation. According to Weiss (1998: 4) evaluation is "The systematic assessment of the operation and/or outcomes of a programme, compared to a set of explicit or implicit standards, as a means of contributing to the improvement of the programme." Weiss elaborates each of the key terms given in the definition of evaluation. 'Systematic evaluation' indicates that the evaluation research is conducted with formality and rigour, according to social science research canons. 'Operation and/or outcomes' point out to the focus of the

investigation. This implies that some evaluations concentrate on studying the process (the way the programme is conducted), while others concentrate on the outcomes and effects of the programme for its intended beneficiaries.

As can be seen in the above definitions, evaluation is variously defined. Whatever definition is adopted, it is clear that evaluation is a necessary component for refining the planning and execution of a programme and ensuring that it moves towards attaining its objectives.

Evaluation of INSET is carried out in order to contribute to programme improvement. Identifying the weaknesses and strengths of the programme can attain this. Andrews & Wideen (1987) regard evaluation of INSET as a necessary task in that it helps to reveal the merits and shortcomings of a programme. Newton (1993) stresses the need for evaluation of INSET in that INSET evaluation provides a description of what actually happened, assess outcomes/results and improve current and future outcomes.

2.5.2 Summative and formative evaluation

Evaluation can be summative or formative, or both (Neo, 1999). Scriven (1980) suggests that a distinction be made between formative and summative evaluation. Cronbach (1987) contends that the division of evaluation suggests a false division. According to Cronbach, summative and formative evaluations are interrelated. Evaluation that focuses on outcomes can and should be used formatively. When a programme fails, it is important to know why it failed and how to do better next time. Newton (1993) also contends that a clear distinction can be blurred in practice in that it is common for summative evaluation to play a formative role 'in getting it right next time round'. In expanding this point, Newton (1993) says formative and summative evaluation is likely to change during the life of a programme, in that the former being much pronounced towards the beginning, while the latter towards the end. Furthermore, Newton states the lessons learned when a programme is summatively evaluated are likely to be carried forward to the next.

Despite the above arguments with regard to the distinction of summative and formative evaluation, most educationists indicate the uses of formative and summative evaluation separately. In formative evaluation problems are identified and remedial measures are taken while the programme is in process. It is a process of scrutiny, judgement and action designed to effect course improvement (Scriven, 1980). Summative evaluation, on the other hand, assesses the worth or merit of a programme in its final form. It indicates whether the target population during the period of implementation of the programme has attained the objectives of the programme. It also indicates the effectiveness (or ineffectiveness) of the programme and how much the target group has achieved or gained during the specified periods of implementation. This information will enable authorities to decide whether the programme should be extended, or not (Scriven, 1980).

All this imply that evaluation is a diagnostic tool to facilitate decisions about a programme, to improve it, to monitor the programme with a view to identifying its strengths and weaknesses, so that it may be re-directed or refined (Murphy, 1985).

2.5.3 Purposes of evaluation

Many educationists have stressed the importance of evaluation and believe that education is not static or stagnant, but is, or should be, vital and dynamic. Educators are, therefore, constantly seeking new ways to improve educational programmes by identifying the problem areas and developing new approaches, so that the professional ability of teachers is improved.

Evaluation is carried out to contribute to programme improvement. This purpose is stressed in Weiss's definition of evaluation, indicated earlier on page 38. Robson's (1993: 180) short phrase "The purpose of evaluation is not to prove but to improve" is in line with the notion that the purpose of evaluation is to improve a programme. Programme evaluation for improvement can be accomplished in various ways. Identifying the strengths of the components of a programme is one focus of evaluation. Detecting defects of the components of a programme is another. According to Phillips (1997), programme components include methods of presentation, learning

environment, programme content, learning aids, schedule, and the facilitator. Realizing that each component makes a difference in the programme, Phillips (1997) stresses that each component be evaluated to bring about improvement in the programme.

Evaluation is also important to determine success in accomplishing programme objectives. In this regard, evaluation provides input to determine if objectives are being (have been) met. Furthermore, evaluation helps to determine if the programme was an appropriate solution for the specific problem identified.

2.5.4 Methods of enquiry in evaluation

There are many evaluation models that have been suggested as the most suitable methods of effectively carrying out an educational evaluation. They differ in their conceptualizations as to what evaluation is all about, and prescriptions about how one could carry them out (Robson, 1993). In this sub-section, some of the widely known ones will be briefly described.

2.5.4.1 The Kirkpatrick Four-Level Model of Evaluation

The Kirkpatrick Four-Level Model designed by Kirkpatrick, as cited in Phillips (1997), is probably the most well known framework for classifying areas of evaluation. This model assists in determining the types of data to collect and answers four very important questions: reaction, learning, behaviour, and results. Each level measures different but complementary aspects of a training programme (Thackwray, 1997).

Reaction refers to what the participants felt/liked/thought of the programme, including materials, instructors, facilities, methodology, content, venue, etc. Reaction helps to answer the question 'Were the participants pleased with the programme?' Participants' reaction is clearly of potential value to those responsible for the delivery of that particular service (Thackwray, 1997). With regard to the significance of participants' reaction to a programme, Thackwray (1997) points out that training programme

continuation is difficult if not impossible if participants do not like it. Participants must *like* a programme to obtain the most benefit from it. The analysis of reaction is helpful in determining how well a programme was received. Comments and suggestions obtained will be helpful in enhancing the quality of future training and the various other services that support the process.

Learning evaluation, which is the second level of Kirkpatrick's evaluation model, is concerned, according to Kirkpatrick, with measuring the extent to which principles, facts, techniques, and skills have been acquired.

Behavioural change is evaluated to determine the extent to which skills and knowledge learned in the programme have translated into improved behaviour on the job. Phillips (1997) considers observations of the participants' superiors before-and-after the programme as good techniques of measuring behaviour change of participants.

Evaluation of results involves monitoring organizational improvement such as work output changes and quality changes. Results evaluation measures whether the programme has made a difference or not. In other words, what has been the impact of the programme on the institution?

2.5.4.2 Kaufman's Five-Level Model of Evaluation

Some researchers have attempted to modify Kirkpatrick's Four-Level Model of evaluation and add to this basic framework. Kaufman, cited in Phillips (1997), offers one such presentation. Kaufman has added a fifth level addressing the evaluation of societal issues. This moves the evaluation beyond the institution, and examines the extent to which the programme has enhanced society.

2.5.4.3 The CIRO Approach

Another four-level approach originally developed by Warr, Bird, & Rackham (1970) is a rather unique way to classify the evaluation process. As with other approaches, four general categories of evaluation are described, which form the letters CIRO. The

letters CIRO stand for **C**ontext evaluation, **I**nput evaluation, **R**eaction evaluation and **O**utcome evaluation.

Context evaluation is conducted to determine if training is needed. This is accomplished by involving and using information about the current operational situation (or context). Input evaluation involves obtaining and using information about possible training resources to choose between alternative inputs. It involves analyzing the resources available (both internal and external) and determining how they can be deployed so that there is a maximum chance of achieving the desired objectives. Reaction evaluation involves obtaining information about participants' perception about the programme. Reaction evaluation relies on the subjective input of the participants. Outcome evaluation involves obtaining and using information about results or outcomes of the programme. A successful programme produces some initial change in a participant that is reflected in changes of knowledge, skills or attitudes. Training programmes are not conducted primarily for the sake of learning. The main concern is to bring about a positive change in the participant on the job and finally on job performance.

2.5.4.4 CIPP Model

Stufflebeam (1983) gives a brief account about the CIPP Model of evaluation. The CIPP model is an acronym for the four basic types of evaluation in the model - **C**ontext, **I**nput, **P**rocess, and **P**roduct. According to Stufflebeam, the CIPP Model sees evaluation as a tool by which to help make programmes work better for the people they are intended to serve. In summary, context evaluation assists in needs assessment; input evaluation aids in identifying and assessing competing plans; process evaluation guides implementation of plans; and product evaluation involves assessing outcomes (Stufflebeam, 1985).

2.5.4.5 The Illuminative Model

The Illuminative Model of evaluation takes account of the wider context in which educational programmes function. The primary concern of the Illuminative Model is

with description and interpretation rather than measurement and prediction. Thus, it suggests the use of quantitative and qualitative data summary with the purpose of illuminating various aspects of the programme being examined (Hamilton & Parlett, 1987). The findings derived by this method describe programme features and explain the significance of various programme components.

With so many frameworks for evaluation of a programme, the question is "Which one is the best model?" Phillips suggests that there is no best model of evaluation. The best approach, according to Murphy (1985), is one that best answers the evaluation questions. Murphy further points out that there can be no umbrella method that is all things to all evaluators, since each evaluation is in itself unique. Realizing that one type of model cannot be used alone, Robson (1993) also cautions not to follow one style but to use a wide variety of styles. What is needed from most evaluation processes is customer satisfaction. According to Phillips (1997), two major groups are served in most programmes. The first group is the participants who attend, as customers, and must be satisfied with the programme. They must see some value of participating in the programme, and some usefulness of the skills and knowledge that they can learn. Level 1 (reaction) and level 2 (learning) of Kirkpatrick's model of evaluation provide information to judge the extent to which the participants are satisfied. Phillips (1997) calls the second group of customers served in most programme managers (immediate managers, senior managers). They want to observe behaviour changes as participants apply new skills. The data collected at levels 3 (behaviour) and four (results) in Kirkpatrick, CIRO and CIPP models can provide the information desired by the management team, when deciding to continue or justify future programmes.

2.6 Conclusion

The purpose of this chapter has been to survey the INSET literature with particular reference to definitions, aims, modes of delivery, INSET in other countries, and evaluation. The information presented in the literature offers interesting perspectives about INSET. Nevertheless, there is a pronounced lack of agreement on the definition of INSET. Many of the definitions do not clearly indicate the position of the

unqualified but experienced teachers in schools of the developing countries. Despite this ambiguity, it has to be realized that every definition of INSET is significant in that every country, or even a region within a country, develops a strategy of INSET to include the particular needs of teachers, and in some cases the needs of the government. It is also realized that INSET has become an extremely important element in raising the quality of education that learners ought to get, maintaining an effective and adequate corps of teachers, as well as satisfying the needs of individual teachers.

Various aims of INSET are also presented in the literature part of the study. Each aim is concerned to resolve a specific issue. For example, in developing countries, the sheer size of the teaching force, both qualified and unqualified, poses a huge challenge. Upgrading the competence of teachers, extending their general education and enhancing their qualifications thus become the main focus of INSET in developing countries. In contrast, in developed countries, emphasis on the improvement of professional skills for effective teachers and career needs is considered of leading significance. Although different countries use a variety of INSET programmes, they have in common the fact that they all deal with the continuing education of teachers and their professional development.

INSET is more likely to be effective and successful when there is sincere commitment to it from the government and also from other role players. The commitment has to arise from a full awareness of the scale of the problem, and the need for it to be resolved through the provision of facilities and resources, both financial and human.

Evaluation of a programme as surveyed in the literature has also been presented in this chapter. It is indicated that there are various models of evaluating a programme, and some of the models are briefly described above. The models described by no means represent all the models used in evaluation. However, each evaluation model differs from another (in some slight way while in others quite pronounced) and there seems to be little agreement among experts and evaluators on a best model to follow, since no preferred model of evaluation can be recommended to apply to every programme. What is clear, however, is that whatever models are adopted, they must evaluate the programme components so as to contribute to the improvement of the programme in the future.

In the chapter that follows, the methodology used to conduct this study is discussed.



UNIVERSITY *of the*
WESTERN CAPE

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter deals with the research methodology involved in this study. No one conducts research only to collect large quantities of data. According to Berg (2001: 6), "The purpose of research is to discover answers to questions through the application of systematic procedures."

In the search for appropriate methods to adopt in a study focusing on social issues, Fraenkel & Wallen (1993) advise the use of qualitative research methods. Maykut & Morehouse (1994) also recommend qualitative research methods for research studies that are designed to discover social phenomena where people are the participants.

The main concern of this study is to evaluate the INSET programme for unqualified elementary school teachers in Eritrea. The programme was held during the 2000/2001 and 2001/2002 summer holidays. One of the central goals of evaluation is to provide detailed description of programmes through the eyes of stakeholders along with the insights of the evaluator (Posvoc & Carey, cited in Hall & Hall, 1996). Greater understanding of INSET provision can further be increased when the collection of data is not limited to those who attended the training. Effort was made to find out the perceptions of various role players on the following issues or dimensions:

- 1) the Human Resources Development director's perceptions on the existing status of the INSET programme in Eritrea
- 2) school principals' perceptions on whether trainees working in their schools have shown any improvement after the training
- 3) trainers' perceptions on:
 - teaching materials (quantity, consistency with the needs of trainees)
 - duration of the course

4) trainees' perceptions on:

- trainers: the extent to which trainers contribute to trainees' understanding of the course materials and their concern for trainees' academic welfare
- study materials (quantity, clarity and their usefulness to the course)
- the extent to which their knowledge and skills acquired from the INSET enabled them to accomplish their tasks
- the duration of the programme
- accommodation
- the location of the INSET centre and its effect on trainees' domestic situations
- the accreditation of INSET
- the coordination of the programme
- incentives/rewards

3.2 Research design

A research design provides a "conceptual framework" for the procedures used in collecting data. It presupposes the kind of methods to be used and the type of instruments to be developed to collect appropriate data (Ogunniyi, 1992). A research design also includes detailed information about how the study will be carried out, with whom and where (Maykut & Morehouse, 1994).

In order, therefore, to appropriately investigate and answer questions related to the above issues of the programme, Fraenkel & Wallen (1993), who have evaluated the advantages of research approaches in the study of social phenomenon, suggest a qualitative research method. Thus, in this study, a qualitative research method is adopted.

The purpose of qualitative research method is, as Strauss & Corbin (1990: 19) suggest, "... to uncover the nature of a person's experiences with a phenomenon." Berg assumes the use of quantitative research methods to be an inappropriate method when humans are studied. According to Berg (2001: 7), "If humans are studied in a symbolically reduced, statistically aggregated fashion, there is a danger that the conclusion - although arithmetically precise - may fail to fit the reality." Berg (2001:

7) goes on to say that "Qualitative procedures provide a means of accessing unquantifiable facts about the actual people researchers observe and talk to ..." Thus, qualitative research methods allow researchers to share in the understandings and perceptions of others and to explore how people structure and give meaning to their daily lives. Cassell & Symon (1994: 4) also support Berg's explanation by saying, "... it may make sense to count numbers ... However, when looking at the differential distribution of facts, counting may well become inappropriate." Neuman & Watt (1997: 328) make similar claims about qualitative approaches. According to them, qualitative reports "... often contain rich description, colourful detail, and unusual characters instead of using numbers, which do not express emotions and tone of respondents."

Qualitative research, according to Hitchcock & Hughes (1989), enables researchers to learn, at first hand about the social world they are investigating by means of involvement and participation in the world through a focus on what individuals say and do. Mason elaborates the preference of qualitative research methods in understanding the complexity, detail and context of social issues. According to Mason (1996: 4), "... based on methods of analysis and explanation building which involve understandings of complexity, detail and context, qualitative research method aims to produce rounded understanding on the basis of rich contextual and detailed data."

It was for the above reasons that qualitative research method was considered appropriate to answer questions concerning the evaluation of INSET programme for unqualified elementary school teachers in Eritrea.

3.2.1 The data collection tool used in the study

Data collection tools are techniques used in educational research to collect evidence or information that is used as a fundamental source for the analysis of findings and are instruments for drawing conclusions and making recommendations. Cohen, Manion & Morris (2000: 44) define tools as "A range of approaches in educational research to gather data, which are used as a basis for inference and interpretation, for explanation and prediction."

Maykut & Morehouse (1994: 46) suggest the use of qualitative research methods. According to them, "The data of qualitative inquiry is most often peoples' words and actions, and this requires methods that allow the researcher to capture language and behaviour."

To investigate the perceptions of trainees, trainers, and principals of schools where the trainees are working currently on the INSET programme for elementary school teachers in Eritrea, which was held during the 2000/2001 and 2001/2002 summer holidays, the qualitative interview was used as a data collection tool. Phillips (1997) regards interviews as specific instruments to be used as data collecting tools in the evaluation process.

Maykut & Morehouse (1994: 79) define interview as "... a conversation with a purpose." Robson (1993: 229) also defines interview as being "... two person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information and focused by the researcher on content specified by research objectives of systematic description, prediction or explanation." Kvale, cited in Cassell & Symon (1994: 14), defines qualitative interview as "... an interview whose purpose is to gather descriptions of the life-world of the interviewee with respect to interpretation of the meaning of the described phenomenon." Thus, the purposive nature of conversation distinguishes an interview from an ordinary conversation.

King (1994) regards the qualitative interview as the most widely used tool in qualitative research. The explanation that King gives for the wide use of the qualitative interview as a means of data collection is its flexibility. Interviews, especially unstructured ones, give the flexibility other techniques do not provide. Wiersman (1980: 145) asserts "In addition to exploring a point further, interviews enable a researcher to ask for clarification when a response from an interviewee fails to make sense."

The interviewer has the opportunity of giving a full and detailed explanation of the purpose of the study to the interviewee, and to ensure that the latter fully understands what is required of him/her. Furthermore, the interviewer can stimulate and encourage

the interviewee if he/she appears to show lack of interest. This is an advantage over other data collecting techniques that do not allow face-to-face interaction with the subjects. In such data collecting techniques (those that do not allow direct contact with the subjects), a researcher is compelled to gather incomplete and insufficient data or information. Interviews overcome this constraint as the researcher has direct access to subjects.

The additional advantage of using qualitative interview, as a tool of data collection, is, according to King (1994: 14), it is "... capable of producing data of great depth." A further advantage of qualitative interview is that participants feel comfortable, which is not necessarily the case with other qualitative research methods such as participant observation.

There are three categories of interview format, namely structured, unstructured and semi-structured (Robson, 1993, Verma & Mallick, 1999). Each reflects a particular relationship between the interviewer and the interviewee. In this regard, King (1994: 14) comments, "A key feature of the qualitative research interview is the nature of the relationship between the interviewer and the interviewee."

Semi-structured interviews form the only means used to collect data in this study. However, the three categories of interviews need to be discussed, in order to highlight the reasons for selecting the semi-structured interview for this study.

A structured interview, according to Fontana & Frey (1998: 52), is "... a method of interviewing different interviewees in the sample by formulating the same types of questions and limited set of response categories." Fontana and Frey further indicate that the structured interview is easy at capturing precise data of codable nature in order to explain behaviour within the pre-established categories. However, Merriam comments that structured interviews are problematic. According to Merriam (1998: 74), "... rigidly adhering to predetermined questions may not allow a researcher to access participants' perspectives and understandings."

Thus, the structured interview, with closed questions, was found to be too restrictive for the purpose of this study in the sense that it would possibly limit free expression of

ideas of the way the INSET programme was understood by the participants. Because the research would depend on how the trainees, trainers and school principals (indirectly by observing the activities of INSET participant teachers working at their schools) perceive the INSET programme, it was felt that the structured interview questions would be restrictive.

Maykut & Morehouse (1994: 81-82) describe the unstructured interview in the following terms:

This purposeful conversation is not scripted ahead of time. Rather, the researcher asks questions pertinent to the study as opportunities arise, then listens closely to people's responses for clues as to what question to ask next, or whether it is important to probe for additional information.

Although the unstructured interview could be useful as a data-collecting tool, Maykut & Morehouse (1994) do not recommend it for the inexperienced researcher. Phillips (1997) also cautions that the interviewer in an unstructured interview, which needs probing, has to be skilled in the probing process.

Robson (1993: 231) describes the semi-structured interview in the following terms:

The interviewer has worked out a set of questions in advance, but is free to modify their order based upon the perception of what seems most appropriate in the context of the 'conversation', can change the way they are worded, give explanations, leave out particular questions which seem inappropriate with a particular interviewee or include additional ones.

As indicated above, the semi-structured interview was adopted as a data-collecting tool. The semi-structured interview was found to be important in structuring the responses of the interviewees so as to give information on the required area. It also allowed raising necessary questions that occurred during interviewing. A set of open-ended questions allowed the interviewees to explore areas of interest, and the interviewer, through the interview schedule, was assisted in covering important questions.

Kvale (1996) states two forms of semi-structured interviews, namely one-to-one or personal and focus group interviews. The form of semi-structured interview adopted in this study was not the focus group interview. Instead, the one-to-one interview, which involved a meeting between the researcher and one interviewee, was adopted. According to Kvale (1996: 101), "The group interaction in focus group interview reduces the interviewer's control of the interview situation ..." On the other hand, the one-to-one interview has advantages. Denscombe (1998: 114) lists the advantages of one-to-one interview as follow:

- It is easy to arrange.
- Opinions and views expressed throughout the interview stem from one source: the interviewee.
- It is easy to control: the researcher has only one person's ideas to group and interrogate. Inevitably an interviewee rambles and moves onto areas that most interest him/her. In the process, the interviewer may lose some control over the interview. A one-to-one interview solves such constraints in the interview.

Four sets of semi-structured interview questions were developed in this study: one for the trainees, one for the INSET trainers, one for the school principals, and one for the Director of Human Resources Development (see Appendix III, IV, V and VI respectively). These interviews provided adequate information about the perceptions of the above informants with respect to the evaluation of INSET programme for unqualified elementary school teachers in Eritrea.

Kane & O'Reilly-de Brun (2001) aver that bias in research findings can be reduced when you examine the situation from different angles. In light of these arguments, it can be said that the information obtained from the above informants who have/had different roles in the INSET programme served to provide rich information on the issue under study.

3.2.2 Data collection through the interviews

As Behr (1988) has suggested, a record of the replies of interviews must be kept. It is possible to do this by taking down full notes during the interviews. However, taking

notes during interviewing has several disadvantages. It is estimated that even an experienced interviewer recalls only a few of the important responses and so the data can be biased. Furthermore, respondents may be annoyed if their responses are not written down. Taking notes may also upset interviewees in situations where they are asked to reveal sensitive or confidential issues. Extensive note taking during interviewing may also disrupt the effectiveness of communication (free flow of conversation) between the researcher and the interviewee. Even if a minimum of information is recorded, the researcher is likely to have his/her head down for long periods and eye contact could be lost. Moreover, as moments of silence are inevitable as the researcher writes, rapport is difficult to maintain.

The use of a tape recorder is undoubtedly the most convenient method of recording the interviews. From the various methods of recording interviews (videotaping, audiotaping, note taking, remembering), Kvale (1996) suggests tape recording as the most advisable way of recording interviews. Borg & Gall (1989) cite several advantages of using a tape-recorder in recording interviews. The most important one is that the researcher cannot record selected information that favours him or her. A tape-recorder can record words and tones, pauses, and the like, in a permanent form that can be returned to again and again for re-listening. It also speeds up the interview process because there is no need for extensive note taking.

Interviews were conducted in Tigrigna (one of the widely spoken languages in Eritrea). Interviewing in the local language helped the researcher and the interviewees to effectively communicate during the interviews.

Thus, to create a good relationship between the researcher and each of the interviewees, and to keep a full and accurate record of what the interviewees said and how they said it (tone), a tape-recorder was used in this study. The tape recordings were later transcribed for the purpose of analysis.

3.2.3 Sample description

All human researches begin with the decision about the size and character of the sample of people to be researched. Rubin & Rubin (1995) make it a requirement that the participants should be knowledgeable about the subject under study and, secondly, they should be willing to be interviewed. Interviewees who may have special insights or whose position makes their viewpoints noteworthy are selected in qualitative research (Hamilton & Parlett, 1987). Hamilton & Parlett further note that those interviewed can also include more distant but equally relevant figures, e.g. officials from whom the innovation stemmed.

Though desirable, it is hardly possible to interview every programme participant, except in small innovatory programmes or with large research teams. Fink, in Hitchcock & Hughes (1995), recommends qualitative-field researchers to have a smaller number of informants/respondents, but research them in greater depth than is usually achieved in questionnaires or surveys.

Maykut & Morehouse (1994: 45) indicate, "In qualitative research, participants are carefully selected for inclusion, based on the possibility that each participant ... will expand the variability of the sample." In this study in which the purpose was to evaluate the INSET programme for unqualified elementary school teachers in Eritrea, purposive sampling was adopted to select participants. In contrast to random sampling that tries to achieve variation in the sample through the use of random selection and large sample size, purposive sampling increases the likelihood that variability common in any social phenomenon will be represented in the data (Maykut & Morehouse, 1994).

A total of fourteen participants, who directly or indirectly have knowledge of the INSET programme, were interviewed. From the total number of the participants, six were trainees, five trainers (each teaching a specific course in the INSET programme), two school principals, and the director of Human Resources Development. The reason why I interviewed a small number of participants was, firstly, to save time in collecting the necessary information and, secondly, to be able manage the data and

study the issue in-depth. It was believed that the smaller the data in the study, the more manageable and easy to reveal the issue under study.

3.3 Research ethics

Prior to conducting research, it is necessary that access to the subjects be negotiated. The negotiations for this work were done with the Eritrean Human Resources Development Project (EHRD) Project Coordinating Unit (PCU) of the University of Asmara and the Department of Human Resources Development of the MOE of the Government of Eritrea. A letter of access indicating that the investigation would be carried out in connection with a degree course that could yield useful information about INSET programmes for unqualified elementary school teachers in Eritrea was granted to the researcher. With permission granted (see Appendix Ia and Ib and II respectively), the researcher approached the trainees, trainers, school principals where the trainees are currently working and the director of Human Resources Development in the places where the data were collected. The trainees and school principals involved in this study were based in four schools. The trainers were based in three other schools. It has to be noted that the INSET trainers do not work at the INSET centres permanently. The trainers return to their respective schools where they work permanently after they train the unqualified elementary school teachers during the summer holidays.

There is a wide acceptance that research involving human participants should be performed with the informed consent of the participants. Diener & Crandall, cited in Nachmias & Nachmias (1981: 324), define informed consent as, "... the procedure in which individuals choose whether to participate in an investigation after being informed of the facts that would be likely to influence their decision." Kvale (1996: 112) describes informed consent as, "... informing the research subjects about the overall purpose of the investigation." Informed consent further involves obtaining the voluntary participation of the subject, with his or her right to withdraw from the study at any time." Informed consent, therefore, protects and respects the rights of self-determination, which allows the participant the right to refuse to take part or to withdraw once the research has begun.

With this in mind, appointments were made with each participant after the researcher assured their willingness to participate. The purpose of the study and how the data were to be collected were explained to each participant.

In order to build a cordial relationship at the start of the interviews, participants were also assured of confidentiality and anonymity. The statements of Maykut & Morehouse (1994: 94) were a source of guidance in conducting interviews, namely:

It is important to begin the interview with several important features: a personal introduction; a statement on what will be done with the results of the study; a statement of confidentiality of the interview; a request for permission to audio-tape the interview; and a statement informing the interviewee why he or she is being interviewed.

Taking cognizance of the experts' advice, the right of participants to remain anonymous was taken into consideration. Care was taken not to tell the next interviewee what another interviewee had said. In this mini-thesis, pseudonyms have been used for trainees, trainers and school principals. Trainees are identified as T₁, T₂, T₃, T₄, T₅, and T₆. Trainers are referred to as Tr₁, Tr₂, Tr₃, Tr₄, and Tr₅. School principals are identified as P₁ and P₂.

The other ethical issue that was taken into account is confidentiality. Participants were told that the information that they provide would be treated as confidential, that is, the private data identifying the participants would not be reported publicly. Having assured confidentiality and anonymity, participants provided a great deal of valuable information on the topic under study.

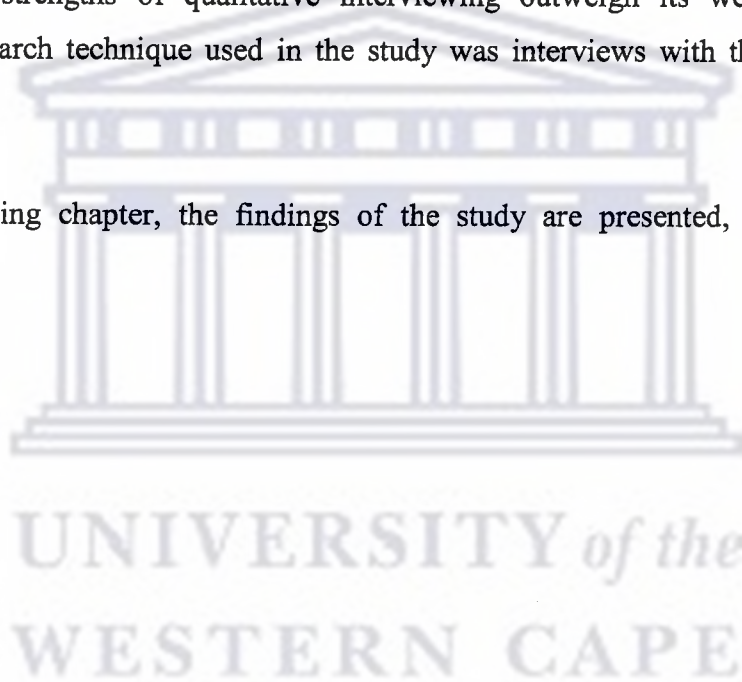
3.4 Conclusion

The purpose of this chapter has been to locate the design of evaluation research incorporating humans. The lesson learned in this chapter is that in conducting a research, it is crucial to adopt a research method that suits the research study. Instead of adopting many research methods, one has to focus on a research method that helps to answer the research questions. As explicated in this chapter, research studies designed to discover social phenomena where people are the participants require

qualitative research methods. While there are various kinds of data collecting tools in qualitative study, the literature survey on methodology shows that the qualitative interview stands high amongst the other techniques in investigating social issues in-depth.

However, it can be argued that qualitative interviewing has its weaknesses. The findings of the study depend on the subjective judgement of the interviewees. The interviewees may reflect what they feel rather than what is actually happening. Moreover, the researcher might not obtain the necessary details of information if the interviewees are not willing to provide the information. However, as indicated in this chapter, the strengths of qualitative interviewing outweigh its weaknesses. The principal research technique used in the study was interviews with the INSET role players.

In the following chapter, the findings of the study are presented, analyzed, and discussed.



CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

As indicated in chapters one and three, this study aims to evaluate the INSET programme for unqualified elementary school teachers in Eritrea that was presented during the 2000/2001 and 2001/2002 summer holidays.

In order to present and analyze the data collected, the interview questions with trainees are grouped into five categories. These categories are: practical arrangements of the programme, course materials that were provided to trainees, course presentation, the practical value of the INSET, and other general areas such as incentives/rewards.

This chapter is divided into two parts. In part one, the data collected from INSET trainees, trainers of the INSET, and school principals where the INSET trainees are currently working will be presented and analyzed. In addition to these, the data collected from the interviews with the Director of Human Resources Development at the MOE will be presented. In part two, the findings of the study will be discussed.

In Eritrea, teacher education is under the operational management of the Department of Research and Human Resources Development (MOE, 2001b). Thus, the courses that are offered in the INSET for unqualified elementary school teachers are syllabus-based and are prepared in accordance with the curriculum of the Asmara Teacher Training Institute. Since the practical value of the INSET for unqualified elementary school teachers in Eritrea is evaluated against the aims of the Asmara Teacher Training Institute curriculum, it is imperative to give a description of the curriculum as outlined by the institution.

The aims of the Asmara Teacher Training Institute curriculum as identified by the institution are broken down into the following areas, each of which shows what each trainee is expected to achieve at the end of the training (MOE, 2000):

- **Subject matter:** In this area, trainees are expected to have adequate knowledge of the areas they are expected to teach. With regard to the subject matter, the curriculum stresses the need to demonstrate a knowledge and understanding of the subjects trainees learn.
- **Methodology:** The curriculum places emphasis on methodology since teaching a subject without effective techniques/methods of teaching is of little value. Thus, various teaching methods are taught during the training.
- **Planning:** Education encompasses purposive activities and these purposive activities are best accomplished when they are carefully planned. Planning gives purpose and direction to teaching and eliminates aimless and haphazard activity. In considering the values of planning, the curriculum recommends trainees to be appropriately trained in this area.
- **Classroom management:** In this area, trainees are expected to manage the class effectively by taking account of factors such as motivation, individual differences and resources.
- **Resources:** Trainees are also taught how to prepare, select, utilize and evaluate teaching resources, including textbooks.
- **Assessment/Diagnosis:** The curriculum stresses the need to assess students' performances. Trainees are made aware that without assessment, teaching by itself is incomplete. Hence, at the end of the course, trainees are expected to use appropriate means of assessment of pupils' learning, including monitoring, diagnosis and feedback.
- **Recording/Administering/Reporting:** Trainees are trained how to keep appropriate records and to report to concerned parties.
- **The community:** The curriculum also tries to encourage trainees to be aware of the need to play an active role in integrating school and community.
- **Research:** As an educated people, trainees are expected to read and do some research. Thus, the curriculum encourages trainees to demonstrate basic research skills and to carry out community/school-based research.

- **Attitudes:** The curriculum encourages trainees to develop great enthusiasm as teachers and to act as models of national cultural values.
- **Reflection/teacher in society:** Self-awareness and reflection are not only encouraged but also required of trainees. Trainees are taught to show self-awareness and the ability to reflect on their learning, teaching and working with others.

Thus, the situation analysis aimed at determining the usefulness of the INSET given to trainees to help them to actualize the above mentioned specified areas in their job.

4.2 Data presentation and analysis

In order to collect data for the study, interviews were held with the INSET trainees, the INSET trainers, the principals of schools where the trainees are currently working, and the Director of Human Resources Development. Since the interviews done with each group of the above interviewees differ slightly, the presentation and analysis of the data obtained from each group of interviewees will be presented separately.

4.2.1 Interviews with the INSET trainees

4.2.1.1 Practical arrangements of the INSET

Where was the training given to you?

In Eritrea, there is no permanent venue where INSET is given to unqualified elementary school teachers. During the first summer (2000/2001) INSET was given at Barka Secondary School, which is located in Asmara, and during the second summer (2001/2002) the INSET was given at Decamare Secondary School, which is 40 kilometers to the northeast of Asmara.

Where were you accommodated?

Respondents pointed out that they were accommodated in hotels, which charged Nakfa seventy (Nakfa is the Eritrean currency) per day for both the hotel accommodation and food during the first summer. During the second summer, however, trainees were not given a per diem. Instead, they were accommodated in dormitories in a boarding school, where they were given food.

The trainees expressed their preference of venues and accommodation. All of them preferred Barka Secondary School and Hotel to Decamare Secondary School. T₄ explained his feelings as follows:

I liked the venue and accommodation in the first summer. Each trainee stayed in a room, which was quite convenient to study, and at times discuss with other trainees in the neighbouring rooms in the same hotel. In the second summer, we had problems. Firstly, the venue for the INSET was far (approximately three kilometers) from our dormitories. It was very far, especially for the pregnant and crippled trainees.

T₁ made a similar point, "I liked both the venue and accommodation in the first summer. There were problems in the second summer. Ten trainees shared a room to sleep in. It was not convenient to study due to overcrowding and disturbance" (T₁). T₅, a female trainee who had a child with her, explained her dissatisfaction at the accommodation in the second summer in the following way: "My younger child was with me. One big room was provided for ten female trainees. Some of the trainees had children. It was very difficult to keep my child quiet in order not to disturb the others." Similarly, the rest of the respondents expressed their dissatisfaction with the venues and the place where they were accommodated in the second summer.

How did the venue for the INSET affect your family and domestic responsibilities?

As for the effects of the venue for the INSET on the respondents and their families, the respondents indicated that staying away from home for several weeks disturbed the usual family set-up. This feeling was pronounced among those respondents who are

married and have children. T₂ said, "It was not easy to leave my family alone and attend INSET that was given far from my residential area. However, I had to give utmost priority to the opportunity that I would not get it again. Thus, I attended despite its challenges."

Other respondents, especially those with young families, commented on the disadvantage of INSET courses far from their locality. T₄, for example said, "I left my child with my family. Frankly, I was not able to concentrate on my studies. However, realizing that I would not get another opportunity of upgrading my qualification, I decided not to miss it." T₅ had a similar feeling. She said,

To attend INSET far from my residential area presented some problems. I am married and have children. I left my children with my mother-in-law and took the youngest child with me. I went to my residential area every weekend to see my child who I left with my mother-in-law. The training was really challenging with regard to family responsibilities.

T₃ also stated a similar opinion about the effect of the venue, although he indicated that his wife, who is a teacher, was one of the INSET participants.

While most of the INSET trainees interviewed expressed their dissatisfaction, T₁, who is single, felt that the existing arrangement of the INSET for unqualified elementary school teachers did not affect his family and domestic responsibilities.

Generally, it is difficult to prioritize two things that are equally important and occurring at the same time. In this case, attending INSET for qualification purposes and doing some activities with my family during the summer holidays. However, since I had an interest to become a qualified teacher, I decided to attend the INSET for unqualified elementary school teachers. I was less concerned about the family and domestic responsibilities since I am not married (T₁).

Where do you prefer INSET to be given to teachers? Why?

Most of the respondents suggested a local venue for INSET. They further pointed out the family and domestic problems mentioned above could have been avoided if INSET had been given at a local level. Almost all the respondents preferred INSET courses

that are arranged at places that suit their individual circumstances. Although T₅'s preference was for a local venue for INSET, she expressed her doubts on the possibility of implementing INSET at local centres. According to T₅:

Local provision of INSET can motivate teachers. It is difficult to attend INSET leaving your children and other family responsibilities at home. Had the INSET I attended been given in or near the place where I am residing, I could have been able to concentrate on my studies. Nevertheless, I do not think that what I am suggesting is practical. The MOE of the Government of Eritrea may not have the necessary human and material resources for INSET to be implemented at local level. The local organization of INSET may not be possible unless resources are sufficient.

Do you think the duration of the INSET for unqualified elementary school teachers was long enough?

The INSET programme for unqualified elementary school teachers in Eritrea is offered for two successive summer holidays, seven weeks in each summer. When the trainees were asked to comment on the duration of the INSET, nearly all said that the duration was too short to finish the required portions in some subjects. T₁ said, " Generally speaking, the duration was short. There was not enough time for discussion in some subjects." When T₁ was again asked to point out the subject/s that needed more time, his reply was Education Theory and Practice. T₄ and T₆ also made similar comments about the shortage of time allocated for the INSET. When trainees were asked to mention the courses that were finished within the given duration of the INSET, they mentioned General Science, Social Studies, and Mathematics.

An attempt was made to ascertain some of the effects of the duration of the INSET in covering (finishing) the topics in Education Theory and Practice. T₃ and T₄ were of the opinion that there was inadequate time for discussion of the topics. These respondents further indicated the trainer in Education Theory and Practice was using more of a lecture method in order to finish the topics. On the other hand, T₂ and T₃ pointed out that some trainees, especially the slow learners, had difficulty in coping with lessons in Education Theory and Practice. Consequently, they tended to show some frustration.

As indicated above, the respondents had some complaints about the duration of the programme. They were asked to suggest the desired duration of the INSET. T₂ said, "The INSET should be given over two summer holidays, three months in each summer." T₄ suggested a longer time for the INSET. Her suggestion was two summer holidays, four months in each summer. Another respondent, T₆, suggested an even longer time. According to him, INSET should be given for three consecutive summer holidays. Although she did not mention the exact duration, T₅ suggested that the INSET should be given for a longer time so that trainees could get ample time to discuss among themselves and with their instructors.

On the whole, the respondents felt that the duration of the INSET was too short and that it was thus demanding.

How do you assess the coordination of the programme?

When trainees were asked to comment on the coordination of the INSET programme, they gave the following responses: "The coordination was good. The training began according to the written notification that was given to the school where I am working" (T₁). To the same question, T₃ and T₆ indicated that there was a regular timetable and effective teaching-learning processes.

However, T₂ expressed his dissatisfaction saying, "Although there was a coordinator, he was not able to solve the problems with respect to the shortage of hand outs and the inconvenience of the dormitories."

4.2.1.2 Course materials

How do you assess the course materials of the INSET for unqualified elementary school teachers?

In the INSET for unqualified elementary school teachers in Eritrea, five courses/subjects are offered. They are Education Theory and Practice, Mathematics, English, Social Studies, and General Science.

When trainees were asked about the usefulness of the courses offered in the INSET, their responses were largely positive. The respondents considered the courses interesting and 'worthy of their time'. They regarded Education Theory and Practice as the most important and useful course. The reason is, according to the respondents, that Education Theory and Practice equipped them with the pedagogic aspects of teaching that are outlined in section 4.2.1.4. Respondents also gave their opinion on the contents of the courses. In this regard, they said, "The contents of the courses were easy to understand and 'attractive'." However, they did not hesitate to point out that the topics in Education Theory and Practice were so vast that they did not have enough time to read the topics thoroughly and understand them before they proceeded to the next lesson. The content of the Education Theory and Practice was not organized into a manageable amount. T₁ explained this as follows; "The topics in Education Theory and Practice were vast. The teacher who was teaching this course was trying to cover many topics in every session. A lot of activities were given in a short time."

Trainees were also asked to comment on the types of study materials. All of the respondents said the study materials were only handouts. However, they indicated that they were not sufficient and in some subjects handouts were not given to them. T₄ gave a representative statement with regard to the quantity of the handouts as follows: "Handouts were not sufficient. Particularly handouts for Social Studies and Education Theory and Practice were not given to us in the first summer and second summer respectively."

4.2.1.3 Course presentation

What comment do you have on your trainers' capacity to train teachers?

Many of the trainers involved were secondary school teachers who have a first degree specializing in different subjects. They were recruited on a temporary basis to train the INSET trainees. Some respondents expressed their views as follows: "Not all the trainers had the same efficiency in presenting the subject/course they taught. Some trainers were devoted. They utilised their time and energy to help trainees. They were competent" (T₁). T₃ indicated the trainers in the first summer (2000/2001) were

expatriates (Indians) and Eritreans. According to T₃, on the whole, the expatriates were not as effective as the Eritreans in transmitting the knowledge to the trainees. Through the interviews, it was possible to extract the reason why T₃ was not happy with the expatriates' performances. The major problem was the way the expatriates were pronouncing words. The other point that T₃ stated was the shortage of handouts that exacerbated the above problem, especially in Education Theory and Practice. T₃ went on to say that the aforementioned problems could have been minimized if sufficient handouts had been given to trainees.

Finally, T₃ stated that he and the other trainees were happy that the Human Resources Development considered the trainees' complaints in the second summer (2001/2002). Consequently, the Human Resources Development recruited many Eritrean trainers and, he said, the problems mentioned above were minimized.

T₄ had a similar view. According to her:

In the first summer, the trainers were expatriates (Indians) and Eritreans. Generally, the Eritreans were performing better than the expatriates in presenting the lessons. They were showing greater concern for our academic welfare. They were able to identify our weaknesses/problems and gave due support. I, myself, was not able to understand the pronunciation of the Indian trainers. The other weakness of the Indian trainers was they were lenient in invigilation and assessing trainees' performances.

T₆ also was of the opinion that most of the INSET trainers encouraged the trainees to study hard and achieve good results. T₆ concluded by saying, "The trainers were fit to train unqualified but experienced elementary school teachers."

In contrast to the above positive responses, other respondents were not happy with the performances of the INSET trainers. T₂ said, "The trainers were not competent enough to train unqualified but experienced elementary school teachers. I was bored with their poor performances in the teaching-learning process." T₅ also said, "One or two trainers were not supportive. Those trainers were undermining our experiences as teachers and the knowledge we can contribute during class discussions. Those trainers treated us as like 'little children' on the course." T₅ further remarked that the selection of trainers

should be done carefully. She suggested regular supervision of the performances of the INSET trainers.

In the interviews, respondents were asked to comment on the teaching methods the trainers employed in the INSET. According to the responses, the INSET trainers used different teaching methods, such as group work and lectures followed by an adequate period of questioning or comment. T₆ expressed his feeling as follows: "The teaching styles that the trainers themselves used were varied. There was group work, working with people, which I enjoyed. There were lot of different things happening which kept me interested. Their teaching style was inspiring."

4.2.1.4 Practical value of the INSET

Firstly the respondents were asked to state why they attended the INSET and to point out if their expectations were met. Secondly, they were asked to indicate whether they had acquired the knowledge and skills as outlined in the aims of the Asmara Teacher Training Institute curriculum. Thirdly, they were required to assess the extent to which the INSET programme has influenced the performances of the trainees in the classroom.

Why did you attend the INSET?

Most of the trainees interviewed attended the INSET to become qualified elementary school teachers. The expectation that the INSET would help them to acquire new ideas and make their work easier was quoted as the main reason. The following were the responses of the trainees interviewed:

"I participated in the INSET to become a qualified elementary school teacher and to acquire adequate subject matter knowledge" (T₁). T₂ also indicated he attended the INSET firstly, to gain more knowledge and skills and to improve his job performance, and secondly, to become a certified elementary school teacher. Furthermore, T₂ hoped for salary increment upon his certification as a qualified elementary school teacher. T₄

who viewed herself as an incompetent teacher before the INSET, gave a comprehensive reason why she attended the INSET:

I was recruited to teach at elementary level without having the required qualification. I believe that unqualified teachers may not have the skills and knowledge needed to teach effectively and confidently. Thus, I participated in the INSET in order to acquire knowledge about subject matter and pedagogic aspects of teaching. I believe that it is only after I acquire these that I can teach effectively.

T₆ gave a contradictory response. At first, he was not certain about the reason for his participation in the INSET. However, when he was probed, he mentioned the purpose of certification.

As can be seen from the responses of most of the interviewees, the main reason the trainees attended the INSET was in order to become qualified teachers.

To what extent have your knowledge and skills acquired from the INSET enabled you to:

- **Prepare lesson content**
- **Prepare a lesson plan**
- **Assess your students' performance**
- **Choose an appropriate teaching method**
- **Prepare and use teaching aids**
- **Manage the classroom effectively**

As indicated earlier, the aim of the Asmara Teacher Training Institute curriculum is to enable the unqualified elementary school teachers to acquire sound knowledge and skills in the areas listed above. Thus, it was the intention of this study to investigate the perceptions of the INSET trainees about the extent the INSET had helped them to acquire the knowledge and skills in these areas. Moreover, INSET trainees were required to provide feedback on how the skills and knowledge acquired in the INSET have been applied on the job.

Trainees' perceptions of the impact of the INSET on the preparation of lesson content

Selecting and preparing lesson content is an important skill for teachers to make the teaching learning process more meaningful. The trainees were asked if the INSET had helped them in selecting and preparing a lesson content. The respondents said that they had a good experience in accomplishing this task. T₅, for example, said,

This had been a routine activity. I prepared lesson notes and presented the lesson according to the lesson plan. However, it cannot be denied that after the INSET, I came to know, as far as possible, to select the main points from the vast topics in the textbook. Moreover, I came to realize the need to relate a given lesson to the learners' environment and to the previous lesson.

In this section, the focus of the interviews was on how the INSET had influenced the trainees' practice as teachers. One particular point that most of the respondents considered as a positive effect was the development of self-confidence. They explained that the cumulative knowledge they gained from the INSET enabled them to be competent and confident teachers, thereby enabling them to accomplish their task effectively. T₁, for example, said, " Now, I am more able to communicate with my students with greater confidence than before attending the INSET. Certainly, I feel I have more confidence since I have gained more knowledge." Another respondent, T₅, said, "I think the INSET has given me a lot of personal confidence. I feel that it contributed toward my personal development. Developing self confidence was a big part of that."

Trainees' perceptions of the impact of the INSET on preparation and use of lesson plans

In explaining the usefulness of the knowledge and skills acquired in the INSET with respect to the preparation and use of lesson plan, the respondents indicated that they are not strangers with the preparation and use of a lesson plan. All the respondents said one of the things they learned in Education Theory and Practice in the second summer was how to prepare and use a lesson plan. However, they stated their experience was not sufficient and thus the INSET has improved their knowledge in this area. The

statements "I had some knowledge on how to prepare and use a lesson plan, which I learned from my colleagues and school principals who are trained. Nevertheless, the INSET has enabled me to deepen my knowledge in this area," was repeated by every respondent. T₆ further explained the importance of a well-prepared lesson plan. According to him,

A lesson plan is helpful in order to cover a lesson according to the time allocated to it. It guides a teacher's activities to achieve an intended goal. If I have a well-prepared lesson plan, I can present my lesson effectively, and my students are not confused because the lesson plan guides me what to teach, how to teach and when to teach.

Trainees' perceptions of the impact of the INSET on the assessment of their students' performances

Trainees should be able to assess the quality of pupils' learning against national standards, to provide meaningful feedback to pupils on their progress and to use assessment to evaluate and improve teaching. Participants were asked to indicate the extent the knowledge they acquired in the INSET helped them to assess their students' performances. All the respondents said that although assessment was not a new concept for them, they learned the importance of giving various items of questions during examinations and tests. T₂, who has six years of teaching experience, had the following opinion on the importance of INSET in his work:

You know I am not a beginner teacher. I have been teaching at elementary level since 1997. It means that I had an idea of preparing questions, correcting examination papers, and giving feedback about the performances of my students. What I can say about the importance of the INSET I attended is that it simply has consolidated my knowledge in this area.

Trainees' perceptions of the impact of the INSET on the choice and application of appropriate teaching methods

Trainees are expected to employ a range of teaching strategies appropriate to the subject or topic in the class, identify a suitable occasion for teaching the class as a whole, in groups, pairs, and create contexts wherein pupils learn. To find out how

equipped they came out after the INSET, trainees were asked if they think they acquired the necessary skills and knowledge to select the most effective teaching methods for their lessons. The respondents said they learned different teaching methods in the INSET in the first summer. They further pointed out that the INSET programme has helped them not to depend solely on one kind of teaching method but to select appropriate teaching methods in presenting their lessons. T₃ stated, "I learned about 7 to 8 teaching methods. In the INSET course, I learnt that each teaching method is equally important depending on the class situation."

T₅ described what they learned about teaching methods in the INSET:

In the INSET, we learned that before we start presenting a lesson, we have to know what method we should use so that there would be effective communication between the teachers and the learners. Before we choose group discussion, lecture, demonstration, or any other method, we need to study the topic/chapter very carefully. We learned to use the teaching methods that ensure maximum participation of learners. We were cautioned not to depend entirely on the teacher-centered method of teaching. These were the main concepts we learned in the INSET.

When T₅ was asked whether she applied what she detailed above, she hesitated for a while and said, "I have applied what I learned in the INSET." On the other hand, T₁ said that he was unable to apply some of the teaching methods he learned in the INSET. He gave the following account of the factors that prevented him from applying the most effective teaching methods in his class:

Although I learned different teaching methods in the INSET, it does not necessarily mean I am applying all of them. The reasons are firstly, the periods allocated per week for some subjects are not enough to apply the teaching methods that require more time. For example, you need more time to deal with group discussion. Secondly, in a class with a large number of students (70 to 80) you do not have any other option other than using the lecture method, which is considered the least desirable method due to the fact that students are not involved. Had the number of students in my classes been small, I could have used teaching methods that involve students (group work, discussion, demonstration, etc.).

Trainees' perceptions of the impact that the INSET has had on the preparation and use of teaching aids

When asked how well the INSET programme enabled them to prepare and use teaching aids, the respondents expressed the feeling that the training significantly enriched their experience in this area. All the respondents pointed out that they had been preparing and using teaching aids in their classrooms even before they took the training. However, they explained that the knowledge they had in this area was limited. They said, after the training they were able to prepare and use teaching aids effectively.

However, the respondents indicated that although they knew the use of teaching aids enhances the teaching-learning process, they said that some of them failed to apply it in their class. They explained that they found the constraints at the schools they teach at insurmountable. These constraints, they explained, discouraged them from pursuing their aim to improve their teaching by the use of teaching aids. T₅ and T₆, for example, stated the lack of materials at their schools were the main impediments to preparing and using teaching aids.

For some respondents, material was not the problem. The training, as T₃ explained, included how to use locally available materials. T₃ exemplified his view, "In teaching the parts of a plant, for example, I show my students real plants that are available in the school compound."

Reflecting upon his experience of using teaching aids, T₁ made the following statement:

I have been working as a teacher before I took the training. I have also been using teaching aids in class. However, after the training, I realized the possibility of preparing teaching aids from local materials that are cheaper and easy to obtain. I did not really know that it was possible to prepare teaching aids from local materials.

In general, the respondents were of the opinion that the INSET has enriched the knowledge they had about the use of teaching aids before they participated in the

INSET. However, some respondents disclosed that lack of materials in their schools hindered them from applying various teaching aids in the class.

Trainees' perceptions of the impact of the INSET on classroom management

Trainees should be able to deploy a range of approaches to create and maintain an orderly and safe environment for learning, to manage pupils' behaviour and to be aware of when it is necessary to seek advice and to be able evaluate and justify their own actions in managing pupils. When asked how their INSET helped trainees in managing their classes, they replied that the knowledge they acquired in the INSET enabled them to manage their classes effectively and thereby create a favourable environment for teaching-learning processes. All the teachers said they learned how to motivate their students - a fundamental factor that promotes effective teaching and learning. Relating the topic with the environment, creating a positive relationship with students, using a variety of teaching methods (some of them), asking questions before starting classes, and telling stories related to the topics, were some of the ways they used to motivate their students.

It was very interesting that one of the interviewees, T₃, stated that before he participated in the INSET, he used to enforce discipline through using corporal punishment. He mentioned that after attending the INSET, he is not using it as a tool for disciplining his students. According to T₃, "I can say that the INSET has helped me understand the negative effect that corporal punishment has on the psychological make up of students. I am not using it now as a means of maintaining discipline of students."

Overall, the majority of the respondents perceived that the INSET programme had some positive impact on their effectiveness as teachers in the classroom.

4.2.1.5 Incentives/rewards

Did you get any incentive/reward after you completed the INSET course? If yes, what kind of reward?

Although they expected to get the same salary as a qualified elementary school teacher, they complained that their salary had not been adjusted so far, which seems to imply a lack of recognition of what had been achieved. T₅ said, " Even though I finished the INSET, my salary has not been adjusted. Something must be given for the time and effort that I spend in attending such programmes. INSET must be seen by teachers as a significant milestone in our career."

In your opinion, should participation in INSET be accredited? If so, how? e.g. remuneration, credit towards study at higher institution, etc.

Many of the respondents were impressed by this question. T₁ and T₂ shared the opinion that INSET participants should get the opportunity to pursue their study at higher institutions. T₁, for example, declared positively his need for further study as follows:

This is an interesting question. This has been my interest for a long time. I know the purpose of the INSET that was given to us was to enable us to teach effectively. Nevertheless, my target is beyond that. Although I did not succeed in matriculating, I have the desire to study at university. It would be encouraging if those participants who achieve good results in the INSET courses get further educational opportunities.

Both respondents added that accreditation of INSET could play a great role in raising teachers' morale. T₂ went on to say that, "There should be a salary increment for INSET participants. Failure to do this will not motivate teachers who are supposed to attend similar courses."

Although the INSET was given for the purpose of certification, T₃ expressed the desire for more INSET activities in order to enable teachers to acquire the knowledge to teach at levels higher than they are teaching now. According to T₃, "To continue

teaching at the same level is boring. There should be promotion opportunities. Teachers who are teaching at elementary level should be promoted to teach at middle school level and so on. This can be done by giving different INSET activities that equip teachers to teach at a higher level."

4.2.2 Interviews with the INSET trainers

In order to evaluate the INSET programme from different perspectives, five INSET trainers (one from each of the courses given in the INSET) were interviewed on some components of the INSET. The interviews with the trainers focused on course materials and the duration of the INSET programme. Besides, trainers were allowed to make any comments on the INSET programme. This section summarizes the replies of the INSET trainers to questions that focus on the above issues.

What did the course materials consist of?

All the respondents said the materials used in the course were handouts and blackboard notes.

Trainers were also asked to give their views on the quantity of the handouts for themselves and the trainees. The responses varied depending on the type of course they taught. Tr₂ and Tr₄, who taught English and General Science respectively, said the handouts were sufficient, and that trainees had them in both summers. The handouts for Social Studies and Mathematics, according to Tr₃ and Tr₁ (trainers in these courses) were less than sufficient. On the other hand, Tr₅, a trainer in Education Theory and Practice, expressed his concern about the quantity of the handouts in this course. He said, "In the second summer, trainees did not get any handout. It was given only to the trainer." Tr₅ further explained that since trainees had no handouts, they had difficulties in following the lessons during each session. As a final comment, Tr₅ complained that a lot of time that could have been used for discussion was spent copying notes from blackboard.

From the responses, it becomes clear that there was a shortage of handouts, especially in Education Theory and Practice.

Were the teaching materials consistent with the needs of the trainees both with regard to subject matter and methodology?

The responses of the trainers to this question were similar. Tr₂ and Tr₅ (trainers in English and Education Theory and Practice respectively) considered the teaching materials in these courses to have been consistent to some extent with regard to the needs of the trainees with both subject matter and methodology. Whereas Tr₁ and Tr₄ (Trainers in Mathematics and General Science respectively) indicated the teaching materials placed more emphasis on subject matter than methodology.

Do you think the duration of the INSET was long enough?

Tr₁, Tr₃, and Tr₅ (Mathematics, Social Studies, and Education Theory and Practice trainers respectively) gave similar responses. According to them, the duration was very short. On the other hand, Tr₂ and Tr₄ (English and General Science trainers respectively) said the duration of the INSET was acceptable. They pointed out that they were able to cover these courses within the specified time (two summer holidays).

The trainers were also asked to suggest the duration of INSET for the future. Tr₃ suggested INSET should start earlier. Tr₂ suggested a longer duration. According to him, the duration of the INSET must be extended because the trainees who have a poor academic background would be able to get time to study. Tr₅, who was a bit worried about the duration of the INSET programme, suggested three summer holidays, eight weeks each summer. He substantiated his suggestion by saying, "The topics in Education Theory and Practice were so vast that the trainees, who had an insufficient academic background and habit of reading, had difficulties in coping with the lessons."

How have the INSET trainees in your school changed after the training?

P₂ was asked to detail the improvements the INSET trainees exhibited after the training. He expressed his reservations about the impact of the INSET. His response was "It is an exaggeration to say the INSET trainees have shown significant change in their work. These trainees have had good experience in teaching."

Although the above question seemed general, it was hoped that the principals would give specific information of any change in trainees' performance after the training. Nevertheless, this expectation was not realized. Thus, to obtain more and clearer information, questions on changes regarding the use of various teaching methods, mastery of the subject matter, planning, assessment and classroom management were asked.

Have the INSET trainees shown any improvement in using various teaching methods in their classes?

It is interesting that both the school principals, P₁ and P₂, answered this question positively. They said the trainees seemed to use the teacher-centered method of teaching before they attended the INSET. Now they tended to use the learner-centered method of teaching. P₁ said, "Trainees have acquired additional knowledge. After the INSET, trainees are making every effort to use various teaching methods." P₁ added that students are much more involved during the discussion of the lessons.

P₂ also made some comments on the trainees' performances after the INSET as follows:

The trainees did not have sufficient knowledge of the significance of the participatory teaching method in facilitating teaching-learning process. At present, the trainees are making all possible effort to apply this. I can say, they have shown improvement in their teaching performances.

Both school principals were requested to clarify their responses to the use of the teaching methods that involve learners given the current situation, large class size (70

to 80 students in a class). At this stage, both principals made it clear that large class size has been a major barrier to fully implementing participatory teaching methods.

What is your opinion of the trainees' performance regarding the preparation and use of lesson plan?

Both school principals had a similar response to this question. P₁ said the following:

Before the INSET, trainees had a limitation in stating the instructional objectives in their lesson plans clearly. After the training, this limitation is minimized to the lowest possible level. The trainees are now preparing their lesson plans stating what learners should be able to do when instruction has been completed. They are able to prepare their lesson plans in such a way that any substitute teacher can use it in class.

Finally, P₁ said, "INSET trainees have been able to state how to conclude or logically round up a lesson clearly."

What is your comment on the trainees' mastery of subject matter after they returned from the INSET?

P₂ expressed his opinion saying, "My opinion is that the INSET has broadened the trainees' academic knowledge." P₁ attempted to connect mastery of subject matter with development of self-confidence. According to P₁, trainees have developed a sense of self-confidence in presenting their lessons. This, according to P₁, is attributed to the fact that the trainees have gained ample knowledge from the INSET.

Have trainees shown any improvement in assessing their students' performances?

P₁ said that assessing has been routine work and that the trainees had been familiar with the preparation of representative questions for examinations/tests/class works and the like. He added that he did not see any significant change as trainees had good experience in this area even before they attended the INSET.

However, P₁ mentioned that trainees have come to the realization that it is unwise to rely on exams, tests, class work and others as the only and final means of measurement of students' academic performance. According to P₁, trainees have developed the need to identify students' problems and provide support by discussing the problems (personal and academic) with parents and the school administration. This, P₁ said, has been a great contribution in creating a good relationship between the school and local community.

Have the INSET trainees shown any improvement in classroom management?

P₂ was of the opinion that the trainees frequently use various activities to motivate their students. He gave the following explanation:

The trainees use many little expressions of encouragement - usually when their students do some thing right. Sometimes, they encourage their students by verbal expression; sometimes by a smile; sometimes a look or gesture. I observed the trainees doing all these things at the beginning of the learning activity ... Generally, the trainees have shown change in that they motivate their students keeping track of the topic under discussion and time.

Corporal punishment, which was used as means of disciplining learners during the colonial period in Eritrea and persisted for some years after independence, has been regarded as inappropriate way of maintaining discipline of learners. According to P₁, the INSET trainees have abandoned corporal punishment in maintaining discipline of students. Instead, P₁ said, teachers discuss students' misbehaviour with either parents or the school administration.

What was the enthusiasm of the trainees after they returned from the INSET?

The school principals said the trainees have not shown greater enthusiasm towards their profession. The school principals indicated that the trainees did not receive the salary increment they expected after they completed the INSET. This, the principals said, has reduced the enthusiasm of the trainees. P₂ mentioned the double shift system as another factor that is contributing to minimizing the enthusiasm of teachers. In

Eritrea, teachers work in the morning and afternoon shifts, which P₂ regarded as a difficult task.

4.2.4 Interviews with the Director of Human Resources Development

The Human Resources Development is one of the divisions of the Department of Research and Human Resources Development, which is responsible for managing the development of human resources in the education sector (MOE, 2001b). In fulfillment of its responsibility, the Human Resources Development organizes and offers various INSET activities for teachers in Eritrea.

In this study, the Director of Human Resources Development in the MOE was approached for information about the aims, target groups in the INSET, rewards/incentives given for those who complete the INSET, and weaknesses and strengths of the INSET programme.

What is the policy for the INSET programme?

When the Director was asked this question, his response was "There is no policy document or guideline for the INSET programme." An interview was therefore conducted with the Director of the Human Resources Development in order to elicit information regarding the objectives of the INSET programme in Eritrea.

Would you explain the objectives of the INSET programme?

According to the Director, the main objectives of the INSET programme are firstly, to professionally qualify teachers who are in service; secondly, to assist teachers to acquire the appropriate academic and professional skills to teach effectively and with confidence; thirdly, to provide access to training for all teachers lacking appropriate academic and professional qualifications recognized by the MOE.

Who are the target groups for this programme?

The Director of the Human Resources Development said that the target groups are the untrained/unqualified/uncertified elementary school teachers. He further indicated although the unqualified elementary school teachers are the main target group, various refresher courses have been given to qualified teachers to update their academic knowledge and skills.

Do you give any incentive/reward for those who successfully complete the INSET?

The response of the Director was " Firstly, we give a teaching diploma to those who finish the INSET. Secondly, the salaries of those teachers are adjusted. Generally, successful INSET trainees receive everything that a trained and certified teacher does."

How do you assess what the INSET activities have accomplished so far?

The Director indicated the INSET activities so far had both strengths and weaknesses. On the positive side, he said, "The INSET has raised teachers' motivation. Upgrading the qualification means enabling them to have adequate academic knowledge and skills to teach. This definitely brings about quality of education. Thus, the INSET has brought about quality of education for learners."

The Director also indicated the problems that the INSET programme experienced. According to him, the possibility of finding competent teacher trainers is not easy. The INSET trainers are recruited from various secondary schools on a temporary basis. The other problem the Director cited was getting funds. He said, "The source of funding for the INSET is partly from the budget of the Government of Eritrea and partly from Non-Governmental Organizations (NGO's)." He added that a certain amount of money is obtained from the UN agencies such as UNICEF and UNESCO.

4.3 Discussion

In this section, the research findings of this study are discussed. The discussion of the findings centres on practical arrangements of the INSET, course materials, course presentation, practical value of the INSET, and incentives/rewards.

4.3.1 Practical arrangements of the INSET

The physical environment of INSET can have a definite effect on the trainees. An environment that is not conducive to learning may not motivate trainees. The trainees may infer from poor facilities that there is little importance attached to the training.

In Eritrea, INSET for unqualified elementary school teachers is given at national level. The unqualified elementary schoolteachers who teach in various schools in the six zones of the country attend the INSET at centres the Human Resources Development organizes.

An analysis of the overall perceptions of the trainees interviewed indicates that the practical arrangement (venue) of the INSET did not encourage trainees, especially in the second summer in that it was very far from the place where they were accommodated and from their residences (see 4.2.1.1 on pages 61-63). Obviously to spend time far from the family makes heavy demands on trainees' stamina and motivation. It is also obvious that the rest of the family cannot remain unaffected by the commitment (Murphy, 1985). The feelings of the trainees concur with Hofmeyr & Pavlich (1987) who aver that an inconvenient INSET centre is a major disincentive in INSET.

The trainees preferred local arrangements to national opportunities for INSET. This seems to be logical. Local arrangements would eliminate the need for residence. Furthermore, local arrangements for INSET would minimize family and domestic problems. Nevertheless, it is worthwhile to state what one of the trainees interviewed said regarding the practicality of providing INSET at local centres. The current situation in Eritrea (shortage of human and material resources), which the Director of

the Human Resources and Development explained, may not allow providing INSET at different local centres.

The physical facilities at the INSET centre should be such that they make the INSET participants comfortable. Yong (1994) contends that providing an environment conducive to learning is as important as imparting knowledge. However, the trainees were not happy with the accommodation offered to them. It did not motivate them because they shared a room, which they considered to be overcrowded.

Throughout the interviews with the trainees and trainers, the short duration of the INSET was echoed continuously. From the responses of the participants one can understand that the INSET was conducted in extremely inadequate and tight time frames that hamper the quality of output of the programme. It is advisable to look critically at the issue of the duration of the INSET. The short duration of the INSET created an overload to both trainees and trainers. An intensive course that does not leave sufficient time or opportunity for reflection and discussion about what has been learned is counter-productive. The intensive nature of the INSET meant that a large amount of information was taught in a relatively short period of time. This seemed to leave little time for discussion, consolidation of what has been learned and for contributions from the trainees themselves. Based on this scenario, the course participants suggested extending the duration of the INSET.

I believe that extending the duration of the INSET may be questioned in terms of pedagogic relevance and cost effectiveness. This should not, however, negate the importance of raising the quality of the training and teachers.

The suggestion that training not be given in the summer holidays but during one or two years full time study at a teacher training college, does not seem feasible because there would be a critical problem of arranging replacements for the unqualified teachers who attend the INSET. Moreover, the Asmara Teacher Training Institute, an institution mandated to train elementary school teachers, may not be able to accommodate all the teachers who would benefit from the training. If it (the Asmara Teacher Training Institute) does attempt to implement this suggestion, the intake can be limited and spread over a number of years.

4.3.2 Course materials

The availability and adequacy of learning and training materials are crucial to conduct sound and quality training. As indicated in the data analysis and presentation, most of the trainees and trainers declared that there was a shortage of handouts, especially in Social Studies in the first summer and Education Theory and Practice in the second summer (see 4.2.1.2 and 4.2.2 on pages 65-66 and 76 respectively). Such deficiency in learning and training materials detracts from promoting quality, effective and efficient training. Trainees and trainers seemed to assume that a plentiful distribution of handouts enhances teaching-learning processes. This assumption is true in that one obvious function of handouts is that they provide a record of the substance (course). The provision of handouts in advance helps trainees to read the content of the handouts and this may enable trainees to interact in class with their trainers and among themselves. Preliminary reading is indispensable. It would help trainees to become acquainted with the topic and would prepare them for the issues that are to be discussed in class. Moreover, trainees may use the handouts after they finish the training. Rudduck (1981) emphasizes that the life span of handouts goes beyond the course since teachers in their classrooms or their colleagues might use them.

Although the trainees interviewed said the content of the courses was easy to understand and 'attractive', the structure of Education Theory and Practice was regarded as difficult. The extent of this course was vast. Trainees had difficulties in following the lessons in this course. This implies that the course has caused the trainees to move on to another topic rather than to consolidate what has already been learned. Moreover, the vastness of the course compelled the trainer to focus on lecturing in order to cover the topics. The result was that there was not enough time to develop effective discussion-based work.

4.3.3 Course presentation

The task of a trainer is by no means an easy one. Selecting trainers is an important factor, and it is believed that the success of an INSET programme might well depend on the trainers' ability to present material and lead discussions effectively. Trainers

should have adequate knowledge of subject matter and subject methodology that they are supposed to give training on. It would be erroneous to assume that all trainees enter the training situation with an identical academic background. The most effective INSET is likely to occur when trainees are strongly motivated to participate. Trainers must provide the atmosphere for professional interaction and enable trainees to make the best use of their potential. In a survey of recent New Zealand and international literature on the transfer of training from INSET courses to classroom practice, Fordyce, cited in Aitken (2000), states that transfer is more likely to occur, amongst others, when INSET courses are facilitated by experienced and supportive trainers.

The responses on the competence of the trainers were varied. Some trainees appreciated the performances of the trainers while others perceived them as incompetent. Some trainers lacked professional commitment and treated the trainees as 'children'. This perception probably is attributed to the change of status from teachers in schools to a student sitting behind a desk. In the second summer, however, there was considerable improvement in the selection and assigning of the INSET trainers (see 4.2.1.3 on pages 66-68). The positive responses of most of the trainers towards the competence of the trainers warrant a comment. The trainers may have adequate subject matter knowledge. However, this does not necessarily imply that they have the necessary knowledge in subject methodology since the trainers lack the experience of teaching in Teacher Training Colleges. I think it is from this view that the Director of the Human Resource Development indicated the lack of competent trainers as a problem encountered in running the INSET.

Enthusiasm of the trainees to attend the INSET is likely to be increased by course teaching methods that appeal to the maturity and experience of the trainees, and match their desire to make the most of the INSET in terms of immediate classroom benefit. Regarding teaching methods the INSET trainers employed, trainees said that trainers used various teaching methods in presenting the lessons. However, the trainer in Education Theory and Practice used more of lecture method due to shortage of time. Alternative approaches to teaching which promote learner creativity and participation would not be possible if there is insufficient time for this to apply.

The finding that most of the trainers used various teaching methods in the INSET is encouraging and concurs with what Harber (1997) and Chisholm, Kearney, Knight, Little & Morris (1987) advocate. According to these authors, INSET trainers should be trained in the importance of using various teaching methods in enhancing teaching-learning processes. The authors further note that the use of more participatory and cooperative teaching methods at INSET courses would help to facilitate the greater use of these in class. The idea behind the need to use various teaching methods is firstly, if lesson presentation is geared to a particular method, for example, lecture method, the fast learners may be bored and the lesson may be beyond the capability of the slow learners. Therefore, the most fruitful way is to use a combination of teaching methods. The second reason that is worth remembering is that INSET trainees, being experienced teachers, often have as much to contribute as to receive.

4.3.4 Practical value of the INSET

The responses of the trainees on why they attended the INSET, the main reason cited was the expectation of professional gain that would ultimately lead to benefit for the pupils. To say the INSET was effective, at least it should help trainees to perform their job in an improved way. An analysis of the responses indicated that the INSET had influenced the trainees in the direction laid down by the programme aims described in section 4.1 on pages 60-61. The INSET was useful because it improved their knowledge on how to prepare and use a lesson plan, prepare teaching aids, choose an appropriate teaching method in classroom, manage class effectively, assess the performance of their students and prepare lesson content (see 4.2.1.4 on pages 69-74). The trainees' responses were in agreement with those given by the school principals (see 4.2.3 on pages 78-82).

The provision for the INSET may be excellent and arrangements beyond reproach, but it will still be ineffective if the opportunities for the trainees to apply the training in their school is very limited or non-existent. It can be argued that trainees may soon forget the new methods or alternative approaches if difficult circumstances, large class size, lack of resources (materials), or lack of encouragement prevent them from putting the training into practice.

While responses about lesson plan preparation, classroom management, assessment of pupils' performances, and selecting lesson content indicated that trainees faithfully applied these in their work place; some teaching strategies were not given the same treatment by trainees. Lack of materials and large class size hindered trainees from using participatory teaching methods. The time allocated for some subjects taught at elementary level also tended to restrict trainees from using participatory teaching methods that require more time. This implies that trainees were compelled to use teaching methods that are not preferred pedagogically. This finding is in line with Mohapeloa's (1982) finding that unfavourable conditions, such as an acute shortage of resources in schools, can be barriers to implementation of what trainees gained in the INSET.

4.3.5 Incentives/rewards

It is encouraging that the trainees received incentives while attending the INSET. This is in line with the findings of Perraton (1993). According to Perraton, in countries such as Zimbabwe, Tanzania and Kenya, teacher education programmes including INSET have been free to students. However, the trainees expressed their dissatisfaction that they did not get any salary increment. This finding contradicts the objectives of the INSET programme. The Director of the Human Resources Development pointed out that trainees obtain salary advancement after they complete the INSET. It can be argued that the mismatch between the objectives of the INSET and reality (delay in salary adjustment) may cause irritation and even anger among INSET trainees, which finally could reduce their motivation to apply/implement what they learned in the INSET in their classes. Teachers' competence, morale, commitment and motivation are significant factors in achieving and promoting the effectiveness of teaching. Encouraging teachers morally and financially to maintain their status, dignity and respect in society is essential. Incentives/reward help to stimulate the enthusiasm and commitment that is needed to sustain an innovation. It should be remembered that the effectiveness of INSET should be seen in relation to the motivation that trainees get. If salary increment is not done on time, the unqualified elementary school teachers who are to attend the INSET in the subsequent INSET programmes may infer the programme not to be useful. Gardner, as cited in Murphy (1987), says failure to

increase salary would not motivate those teachers who have the ambition of attending the INSET.

4.4 Conclusion

The purpose of this chapter has been to present, analyze and discuss the data gathered from the interviews with the various role players of the INSET. Investigating the perceptions of these role players was considered crucial, because if these stakeholders (role players) do not value the INSET programme, it is highly unlikely that the trainees would be willing to implement the course ideas into practice.

The analysis that is reported in this study provided certain insights regarding the status of the INSET for unqualified elementary school teachers in Eritrea. Trainees seemed to have benefited from the INSET programme. The INSET prepared trainee teachers to perform their professional tasks at schools. This is reflected in many of the positive responses with regard to the practical value of the INSET, which include preparing and using the lesson plan, preparing teaching aids, preparing lesson content, choosing appropriate teaching methods, managing the classroom effectively and assessing their students' performances. Given these comments, it can, therefore, be assumed that the INSET has exerted some influence on preparing teachers for classroom activities.

The study has also revealed areas of concern warranting closer attention. The situation of the INSET programme is quite discouraging in terms of the short duration of the INSET, inadequacy of teaching and learning materials, lack of rewards, inconvenience of the venue and accommodation. It can be said that INSET could ultimately have a positive effect on the personal development of teachers. However, participants must like the INSET programme in order for meaningful learning to take place (Thackwray, 1997). Thus, designing and managing INSET to achieve positive outcomes and avert negative ones is clearly essential in all components of the INSET where significant change in knowledge and skills is sought.

In chapter five, concluding remarks and recommendations will be made to improve the situation.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The training of competent teachers and the maintenance of a high level of competency have acquired a new urgency in recent years. It is largely argued that the quality of education offered in schools depends largely on the quality of teachers. For this reason INSET has come to be regarded as an essential component in many education systems. It has been used to good effect to certificate unqualified teachers and to upgrade those in the education systems whose qualifications have been rendered insufficient. This is done because improved qualifications would in turn improve the teachers' status, prospects for career advancement, financial remuneration and professional belonging-identity (Seakamela, 1993). The most important thing in most efforts aimed at improving the quality of the teaching personnel is to improve the overall quality of the teaching-learning process.

The MOE of the Government of Eritrea aims to ensure the provision of quality education to learners by offering relevant INSET courses. Giving emphasis to the search for competent teachers at the start of the recruitment stage, the MOE expresses its commitment to provide effective improvement programmes at the training stage for both the pre-service and INSET training. The main target of these improvement programmes is the sizeable backlog of untrained and unqualified teachers in the education service (MOE, 2001b). To achieve this goal the MOE of the Government of Eritrea has been providing INSET for unqualified elementary school teachers since 1993. The present study aimed at evaluating the INSET for unqualified elementary school teachers that was conducted during the 2000/2001 and 2001/2002 summer holidays for the purpose of certification. The focus of the evaluation was to find out the perceptions of the role players on the practical arrangements of the INSET, the practical value of the INSET, the course presentation, the course materials and incentives/rewards.

The study has indicated that the INSET has both strengths and weaknesses. The rationale for programme evaluation is for improvement (Robson, 1993). Very often, finding weaknesses assumes greater importance than identifying the positive features. They mainly serve to establish an agenda for possible change/improvement. For a better programme outcome, it is necessary to amend those components of the programme that the participants did not like. The following section contains the recommendations to improve the INSET programme. Moreover, comments for further research are included in this last chapter.

5.2 Recommendations

- **The need for school-based INSET**

It has been reported that the INSET venue for unqualified elementary school teachers that is organized at national level has been problematic for the INSET participants.

In the Eritrean context, decentralization as a mechanism for transferring a certain level of responsibility and authority to regional (zoba) education authorities has been operational since the proclamation of Decree No. 86 in 1996. Within the framework of this Decree, regional (zoba) education authorities have been empowered to take decisions on a wide range of education and training issues (MOE, 2001b). Although school-based INSET requires an enormous amount of preparation and resources (see section 2.4.1 on page 33), in the long term, it is necessary to offer school-based training programmes for teachers. The alternative is that the pedagogic/resource centres that are established to meet the needs of cluster of schools at the sub-region levels might serve as INSET centres. This would minimize the problems of family and domestic responsibilities that the trainees encountered attending INSET far from their residential areas.

- **The need for distance education**

Distance education is important when there is a shortage of resources although this limits the use of extensive face-to-face interaction. Because of its demonstrated

success elsewhere in both developed and developing countries (see section 2.4.5 on pages 36-38), the adoption of distance education in upgrading teachers in Eritrea seems to be appropriate. Mahlck & Temu (1989) conducted a study the findings of which are encouraging to distance education proponents. They concluded that:

- There was no noticeable difference between residential (college) trained and distance trained teachers as regards to subject matter knowledge and teaching competency.
- Residential (college) trained teachers outperformed their colleagues in Science. Differences in other subjects were marginal.
- The distance education programme proved a viable alternative in terms of cost effectiveness.
- The residential and distance trained teachers succeeded in developing confidence in their competence.

Another study conducted by Chale, as cited in Perraton (1993), in Tanzania indicated that distance and residential (college-based) trained teachers were found to be equally effective regarding the mastery of academic subjects and teaching skills. Thus, it would be essential if the distance education programme could be set up and made available to Eritrean elementary school teachers.

- **The need to extend the duration of the INSET**

The study reported that the duration of the INSET was too short to finish some courses. Consequently, there was insufficient time for reflection, discussion and the self-development aspects of the course. Furthermore, if trainees had little experience of working in groups themselves, then there would be even less reason to use group work in their teaching. With regard to this point, Harber (1997) argues that the way trainees are taught at teacher training days stay with trainees and influences trainees to teach in a similar manner in their classroom. It is essential that INSET has a substantial amount of time apportioned to it. Short courses that do not address cooperative learning represent false economy. The trainees and trainers made various suggestions on the duration of the INSET. Their suggestions range from two summer holidays (four months each) to three consecutive summer holidays. The suggestion

that the duration should be two summer holidays (four months each) means trainees will remain in INSET until the end of October. This may not be possible in that it may disrupt the academic year of the Eritrean schools, which is from September to June. I would adhere to the latter suggestion (three summer holidays, two months each) as this would not affect the schools' academic calendar too adversely.

In light of this, it is recommended that the duration of the INSET be extended to three summer holidays (two months each summer).

- **The need to offer the opportunity for further study at higher institutions**

The existing INSET programmes in Eritrea are mainly course-based with an emphasis on salary increases and certificates on completing the courses that enable the trainees to be qualified elementary school teachers. The existing INSET does not allow trainees who achieve excellent results to continue their study at a diploma or degree level.

In the previous chapter, it was stated that certain trainees have a desire to continue their studies in order to improve their qualifications and promotability. This implies that trainees have a strong motivation to upgrade their qualifications to a diploma for junior secondary school. Although this would take teachers out of the primary school system, it could probably attract others into the education system if they realize there is a career path open to them. In a study conducted to investigate the factors that attracted teachers to the teaching profession in Brunei Darussalam, Yong (1994) found that opportunity to further study was rated first by the respondents. Prospects for one's own future are critically important in attracting people to the profession. This would in turn eliminate teacher burnout (Bagwandeem & Louw 1993). Straker (1991) warns that the lack of career prospects in the teaching profession is one of the factors that invite teachers to leave their profession and seek other jobs.

Greater flexibility in provision of the INSET programme appears necessary and more attention to teachers' personal development seems appropriate. Creative means must be sought for promotional and career opportunities to prevent stagnation in the education system. Thus, it is necessary to broaden the scope of the INSET in order to provide opportunities for those who have the desire to continue their studies. If those

who are trainable are encouraged, the dearth of qualified and dedicated teachers at schools will be eradicated. Mashile & Vakalisa (1996) contend that accreditation is an essential aspect of INSET in that it has a positive impact on teacher development and motivation. For the simple reason that education is dynamic, teachers need to extend their professional knowledge regularly leading to the acquisition of a diploma or degree. Any endeavour to develop their teaching competencies should be given greater support.

- **The need for INSET policy**

It is of paramount importance to structure training properly in order to anticipate and facilitate institutional changes. Stahl (1976) argues that the drafting of a training policy is vital in order to state explicitly the financial needs of the training programme and the number of people required to monitor the programme. Stahl (1976) further argues that a policy document is necessary in order to outline the aims and methods of the training programme. A policy that indicates aims and priorities of a programme can provide valuable guidance to those responsible for programme implementation. Banki (1986) contends that policy serves as a guideline designed to prescribe and deal with the overall long and short-term goals and objectives, and the activities of a programme.

Realizing that there is no written policy on INSET in Eritrea, it is recommended that the MOE should formulate a policy on INSET in order to standardize the training for teachers. The MOE's commitment to INSET should be expressed in a policy framework encompassing INSET as a contractual career commitment, and the provision of an adequate budget. The policy could provide proper guidelines and authority to conduct the training. It could also help to organize and ensure the overall effectiveness of the training programme.

- **The need for competent INSET trainers**

The recruited INSET trainers were expatriates and Eritreans. Although there was some improvement in the selection of trainers in the second summer, there still exist

complaints on the performances of the trainers, which the Director of the Human Resources Development in the MOE himself witnessed. It is also indicated that the INSET trainers should be competent enough because the effectiveness of the INSET is dependent on their performances. Thus, it is recommended that trainers who have the relevant qualification (trainers who are themselves trained to train elementary school teachers) be appointed.

- **The need for salary adjustment**

The rationale for upgrading teachers' qualifications is two-fold: firstly, to raise the effectiveness in teaching, and secondly to improve their salaries. However, the study has indicated that the teachers who successfully completed the INSET for unqualified elementary school teachers have not yet received any salary increment. This implies that teachers who have the same qualification are earning different salaries. This situation could have undesirable consequences as far as the motivation and morale within the teaching fraternity is concerned.

Although 'access to new ideas' ranks highest among the incentives for teachers' participation in the INSET, salary advantage remains a powerful motivator (Little, 1992). It should be noted that the key element in the condition of service of any employee is salary. A study conducted by Yong (1994) to investigate the factors that attracted teachers to the teaching profession in Brunei Darussalam (a country where teachers earn higher salaries than their equivalents in other occupations) indicated that the respondents rated salary second. This does not mean that teachers in Eritrea should get higher salaries than their equivalents in other occupations. The point is that whenever teachers upgrade their qualification through INSET, their salary has to be adjusted. Financial reward can serve as an extrinsic factor to maintain teachers' commitment to teaching.

Teaching is often described as a profession that requires moral obligation. Obligation, cannot, however, be imposed on teachers. It is obvious that teachers are the necessary, indeed, the most necessary, ingredients of quality of education but still not sufficient to guarantee it. Their contribution to quality education depends upon the establishment of conditions conducive to a sustained high level of morale and motivation. Teachers

have to be motivated in order to build up enthusiasm and confidence in their job so that they can carry out their job responsibly. Dissatisfied teachers are not likely to cooperate with one another, exchange professional ideas and generate collegial integration. Similarly, they are not likely to cooperate enthusiastically with school administrators (Bame, 1991). Thus, it is recommended that the salary of the successful INSET participants be adjusted.

5.3 Areas for further research

It is recognized that the study has been limited to the perceptions of the INSET participants, and, therefore, it would be fitting to make suggestions for further study. This particular study can be used as a springboard for further research as far as the evaluation of the INSET programme for unqualified elementary school teachers in Eritrea is concerned. While the data summaries reported in this study provide responses to many questions, they also elicited many new issues that could not be answered on the basis of the available data. It is necessary to know trainees' classroom performances before and after they attended the INSET. It is also necessary to compare the performances of those teachers who took the INSET to those who did not.

Thus, to arrive at any firm conclusions about the relative effectiveness of the INSET for unqualified elementary school teachers in Eritrea, further research involving the above dimensions is recommended.

5.4 Conclusion

Teachers are indispensable in shaping the generation of tomorrow. Because of this demand the responsibility of teachers as dispensers of knowledge and values has increased to an unprecedented magnitude. Rightfully, teachers must be given the best training available. An education system will not achieve its aims and goals without the provisioning of quality training and the total commitment of its teachers.

Furthermore, if teachers are to apply the knowledge and skills they acquired in the INSET, constraints such as large class size, higher teaching load, lack of rewards

should be avoided. It is recognized that there is no a quick-fix solution to some of these problems. However, it is hoped that with corrective measures in place, the INSET could become a valuable programme in contributing to the academic and professional development of teachers, and consequently the attainment of better performances of pupils at schools. For effective INSET to be realized, the pitfalls mentioned above will have to be addressed.



UNIVERSITY *of the*
WESTERN CAPE

BIBLIOGRAPHY

- Aitken, J. E. (2000). *In-service training for teachers in New Zealand schools*. Retrieved 30 September 2002, from [http://www.ero.govt.nz/publications/pubs.2000/in-service training.html](http://www.ero.govt.nz/publications/pubs.2000/in-service%20training.html).
- Andrews, I. & Wideen, M. F. (1987). *Staff development for school improvement: a focus on the teacher*. Philadelphia: Falmer Press.
- Ashton, P. M. E., Henderson, E. S., Merrit, G. E., & Mortines, D. G. (1983). *Teacher education in the classroom: initial and in-service*. London: Croom Helm.
- Bagwandeen, D. R. & Louw, W. J. (1993). *Theory and practice of in-service education and training for teachers in South Africa*. Pretoria: Van Schaik Publishers.
- Bame, K. N. (1991). *Teacher motivation and retention in Ghana*. Accra: Ghana University Press.
- Banki, I. S. (1986). *Dictionary of administration and management: authoritative, cooperative*. Los Angeles: Systems Research Institution.
- Behr, A. L. (1988). *Empirical research methods for human sciences*. Durban: Butterworths Publishers (PTY) LTD.
- Berg, B. L. (2001). *Qualitative research methods for social sciences*. London: Allyn & Bacon.
- Bill, I. & Peters, C. (1992). The long term effect of two part-time in-service degrees on teachers and schools in Scotland. *Journal of education for teaching*, 18 (1): 29-39. Retrieved on 24 April 2003, from <http://web16.epnet.com/delivery.asp.html>.
- Borg, W. R. & Gall, M. D. (1989). *Educational research*. New York: Longman.
- Bot, M. (1996). *An overview of teacher in-service education and training (INSET) programmes in South Africa*. A report commissioned by the Urban Foundation, Indicator Project SA. Durban: University of Natal.
- Bray, M., Clarke, P. B. & Stehpens, D. (1986). *Education and society in Africa*. London: Edward Arnold.
- Briscoe, E. (1991). The dynamic interactions among beliefs, role metaphors, and teaching practices: a case study of teacher change. *Science education*, 75 (2): 185-199.
- Cane, B. (1969). *In-service training: a study of teachers' views and preferences*. London: National Foundation for Educational Research in England and Wales.

- Cassell, C. & Symon, G. (1994). *Qualitative methods in organizational research: a practical guide*: London: SAGE Publications.
- Chan, S. K.; Fung, Y. & Carr, R. (2002). Distance education for teacher education: Hong Kong experience. *Journal of in-service education*, 28 (1): 163-178.
- Chisholm, B., Kearney, D., Knight, G., Little, H., & Morris, S. (1987). Dealing with disruption: in-house, in-service training for secondary school teachers. *British journal of in-service education*, 14 (1): 162-166.
- Cohen, L., Manion, L. & Morris, K. (2000). *Research methods in education*. London: Routledge.
- Creemers, B. (1994). *The effective classroom*. London: Cassell.
- Cronbach, L. (1987). Issues in planning evaluations. In Murphy, R. & Torrance, H. (eds.), *Evaluating education: issues and methods*. London: Harper and Row Ltd.: 4-35.
- Denscombe, M. (1998). *The good research guide: for small-scale social research projects*. Buckingham: Open University Press.
- Diamond, C. T. P. (1991). *Teacher education as transformation: a psychological perspective*. Buckingham: Open University Press.
- Easen, P. (1985). *Making school-centered INSET to work*. London: Croom Helm.
- Esu, A. E. O. (1991). In-service teacher education in Nigeria: a case study. *Journal of education for teaching*, 17 (2): 189-199.
- Fontana, A., & Frey, J. H. (1998). Interviewing: the art of science. In Denzin, N. K. & Lincoln, Y. S. (eds.), *Collecting and interpreting qualitative materials*. London: SAGE Publishers: 47-75.
- Fraenkel, J. R. & Wallen, N. E. (1993). *How to design and evaluate research in education*. New York: McGraw-Hill Inc.
- Fullan, M. (1991). *The new meaning of educational change*. London: Cassell.
- Galton, M. (1995). *Crises in the primary classroom*. London: David Fulton.
- Gaynor, C. (1998). *Decentralization of education: teacher management*. Consultant Report. World Bank: Washington, D.C.
- Ghenet, T. (2001). *Grade ten Eritrean students' conceptions of the human circulatory system*. Unpublished Master's thesis. Bellville: University of the Western Cape.
- Gottesman, L. (1998). *To fight and learn: the praxis and promises of literacy of Eritrea's independence war*. Asmara: The Red Sea Press, Inc.

- Hall, D. & Hall, I. (1996). *Practical social research: project work in the community*. London: MACMILLAN PRESS LTD.
- Hall, G. & Hofmeyr, J. (1999). *The national teacher education audit*. Synthesis Report, University of the Western Cape. EPU.
- Hall, V. & Oldroyd, D. (1991). *Managing staff development: a handbook for secondary schools*. London: Paul Chapman Publishing Ltd.
- Hamilton, D. & Parlett, M. (1987). Evaluation as illumination: a new approach to the study of innovatory programmes. In Murphy, R. & Torrance, H. (eds.), *Evaluating education: issues and methods*. London: Harper and Row Ltd.: 57-73.
- Harber, C. (1997). *Education, democracy and political development in Africa*. Brighton Sussex Academic Press.
- Harris, B. M. (1980). *Improving staff performance through in-service education*. London: Allyn and Bacon, Inc.
- Hitchcock, G. & Hughes, D. (1995). *Research and the teacher: a qualitative introduction to school-based research* (2nd ed.). London: Routledge.
- Hitchcock, G. & Hughes, D. (1989). *Research and the teacher: a qualitative introduction to school-based research* (1st ed.). London: Routledge.
- Hofmeyr, J., De Wee, K. & McLennan, A. (1994). *In-service teacher education: policy dynamics in South Africa*. Johannesburg: EDUPOL the Urban Foundation.
- Hofmeyr, J. & Pavlich, G. (1987). An evaluation strategy for INSET in South Africa. In Ashley, M. J. & Mehl, M. C. (eds.), *INSET in South Africa: issues and directions*. Johannesburg: Teacher Opportunity Programmes: 75-101.
- Husen, T., Saha, L. & Nooan, R. (1978). *Teacher training and student achievement in less developed countries*. Washington, D. C.: The World Bank.
- Johnston, D. C. (1971). *Teachers' in-service education*. New York: Pergamon Press Inc.
- Kane, E. & O'Reilly-de Brun, M. (2001). *Doing your own research*. London: Marion Boyars.
- King, N. (1994). The qualitative research interview. In Cassell, C. & Symon, G. (eds.), *Qualitative methods in organizational research: a practical guide*. London: SAGE Publications: 14-36.

- Kunje, D. (2002). The Malawi integrated in-service teacher education programme: an experiment with mixed mode training. *International journal of educational development*, 22 (3/4): 321-337.
- Kvale, S. (1996). *Interviews: an introduction to qualitative research interviewing*. Thousand Oaks: SAGE Publications.
- Lamie, J. M. (1998). Teacher education and training in Japan. *British journal of in-service education*, 24 (3): 515-534.
- Lawrence, L. (1995). *The in-service training needs of school teachers in the Eastern Cape*. EPU working paper, No. 3, University of Fort Hare.
- Little, J. W. (1992). Teacher development and educational policy. In Fullan, M. & Hargreaves, A. (eds.), *Teacher development and educational change*. London: The Falmer Press: 170-193.
- Lockheed, M. E. (1993). The condition of primary education in developing countries. In Levin, H. M. & Lockheed, M. E. (eds.), *Effective schools in developing countries*. London: The Falmer Press: 20-40.
- Mahlck, L. & Temu, E. B. (1989). *Distance versus college trained primary school teachers: a case study from Tanzania*. Research report No. 75. UNESCO: Paris.
- Mashile, E. O. & Vakalisa, N. C. G. (1999). Accreditation of in-service education and training (INSET) Programmes for school educators. *South African journal of higher education*, 13 (2): 90-98.
- Mason, J. (1996). *Qualitative researching*. London: Sage Publications.
- Maykut, P. & Morehouse, R. (1994). *Beginning qualitative research: a philosophic and practical guide*. London: The Falmer Press.
- Merriam, S. B. (1998). *Qualitative research and case study application in education*. San Francisco: Jossey-Bass Inc.
- Mills, I. (1985). *How to achieve quality in education*. Boguor Rigis: Anchor Publications.
- Ministry of Education. (2000). *Education for all: policies, strategies and prospects*. Draft Report. Eritrea: Asmara.
- Ministry of Education. (1999). *Education brief*. Eritrea: Asmara.
- Ministry of Education. (2001a). *Eritrea: essential education indicators 2000/01*. Eritrea: Asmara.

- Ministry of Education. (2001b). *Our people are our future: a framework for the development of human resources in the education sector*. Eritrea: Asmara.
- Mohapeloa, J. (1982). Education in Lesotho. In Fafunwa, B. & Aisiku, J. U. (eds.), *Education in Africa: a comparative survey*. London: George Allen and Unwin: 140-161.
- Morant, R. W. (1981). *In-service education within the school*. London: George Allen and Unwin (Publishers) Ltd.
- Murphy, J. G. (1987). *INSET: a model for in-service training for unqualified teachers in South Africa*. Johannesburg: Teacher Opportunity Programmes.
- Murphy, J. G. (1985). *The evaluation of an in-service project for black primary school teachers in South Africa in the early 1980s*. Unpublished Doctoral thesis. Cape Town: University of Cape Town.
- Nachmias, C. & Nachmias, D. (1981). *Research methods in social sciences*. London: Edward Arnold.
- Neo, R. A. (1999). *Employee training and development*. London: The McGraw-Hill Companies, Inc.
- Neuman, W. L. & Watt, J. (1997). *Social research methods: qualitative and quantitative approaches*. Boston: Allyn & Bacon.
- Newton, C. & Tarrant, T. (1992). *Managing change in schools: a practical handbook*. London: Routledge.
- Newton, M. (1993). Styles and strategies of evaluating INSET. In Burgess, R. Connor, J. Galloway, S. Morrison, M. & Newton, M. (eds.), *Implementing in-service education and training*. London: The Falmer Press: 8-38.
- Nixon, J. (1989). *School-focused in-service education: an approach to staff development*. London: Macmillan Education.
- Ogunniyi, M. B. (1992). *Understanding research in social science*. Ibadan: University Press Inc.
- Perraton, H. (1993). The context. In Perraton, H. (ed.), *Distance education for teacher training*. New York: Routledge: 1-17.
- Phillips, J. J. (1997). *Handbook of training evaluation and measurement methods*. Houston, Tex.: Gulf Publishing.
- Provisional Government of Eritrea, Department of Education. (1993). *Basic information on education in Eritrea*. Eritrea: Asmara.

- Robinson, M. & Versfeld, R. (1994). *Towards a policy for in-service teacher education. INSET Policy Initiative (IPI)*, Western Cape.
- Robson, C. (1993). *Real world research: a resource for social scientists and practitioner-researchers*. Oxford: Blackwell Publishers Inc.
- Rubin, H. J. & Rubin, I. S. (1995). *Qualitative interviewing: the art of hearing data*. Thousand Oaks: Sage Publications.
- Rudduck, J. (1981). *Making the most of the short in-service course*. London: Schools Council Publications.
- Seakamela, M. A. (1993). *In-service education and training for the upgrading of professionally un(under)qualified teachers in Bophuthatswana*. Unpublished Master's thesis, Potchefstroom: Potchefstroom University for Christian Higher Education.
- Scriven, M. (1980). *Evaluation thesaurus*. Inverness, CA.: Edge Press.
- Simons, K. & Stanford, J. (1986). Women and INSET: the road to promotion? *British journal of in-service education*, 13 (1): 99-101.
- Somers, J. & Sikorova, E. (2002). The effectiveness of one in-service education of teachers course for influencing teachers' practice. *Journal of in-service education*, 28 (1): 95-114.
- Stahl, O. G. (1976). *Public personnel administration*. New York: Harber and Raw.
- Straker, N. (1991). Teacher supply in the 1990's: an analysis of current development. In Grace, G. & Lawn, M. (eds.), *Teacher supply and teacher quality: issues for the 1990's*: 17-33.
- Strauss, A. & Corbin, J. C. (1990). *Basics of qualitative research: grounded theory procedures*. London: Sage Publications.
- Stufflebeam, D. L. (1983). The CIPP model for programme evaluation. In Madaus, G. F., Scriven, M. & Stufflebeam, D. L. (eds.), *Evaluation models: viewpoints on educational and human services evaluation*. Boston: Kluwer-Nijhoff Publishing: 117-141.
- Thackwray, B. (1997). *Effective evaluation of training and development in higher education*. London: Kogan Page Limited.
- Thair, M. & Treagust, D. F. (2003). A brief history of a science teacher professional development initiative in Indonesia and the implications for centralized teacher development. *International journal of educational development*, 23 (2): 201-213.

- Theron, A. M. C. (1996). Change in educational organizations. In Van der Westhuizen, P. C. (ed.), *Schools as organizations*. Pretoria: Van Schaik Publishers: 135-170.
- Thompson, A. R. (1981). *Education and development in Africa*. London: Macmillan.
- UNESCO. (1997). *World yearbook of education*. UNESCO: Paris.
- UNESCO. (1998). *Teacher and teaching in a changing world*. UNESCO, World Education Report.
- UNICEF. (1994). *Children and women in Eritrea*. UNICEF/ESARO.
- Unruh, G. G. & Unruh, A. (1984). *Curriculum development: problems, processes, and progress*. Berkeley, Calif.: McCutchan Publishing Corp.
- Van Niekerk, J. V. S. (1995). *Implementation of in-service education for teachers (INSET) in schools*. Unpublished Masters' thesis. Bellville: University of the Western Cape.
- Verma, G. K. & Mallick, K. (1999). *Researching education: perspectives and techniques*. London: Palmer Press.
- Warr, P., Bird, M. & Rackham, N. (1970). *Evaluation management training*. London: Gower Press.
- Weiss, C. H. (1998). *Evaluation: methods for studying programmes and policies*. New Jersey: Prentice-Hall, Inc.
- West-Burnham, J. (1994). Inspection, evaluation and quality assurance. In Bush, J. & West-Burnham, J. (eds.), *The principles of educational management*. Harlow, Essex: Longman Group Ltd.: 157-176.
- Wiersman, W. (1980). *Research methods in education: an introduction*. Itasca, Ill: F. E. Peacock.
- World Bank. (1994). *Eritrea: options and strategies for growth (vol.1)*. Washington D.C.
- Yong, B. C. S. (1994). Factors that determine the attractiveness of the teaching profession in Brunei Darussalam as perceived by teacher trainees. *Journal of Education for teaching*, 20 (1): 113-126.



UNIVERSITY OF ASMARA
ERITREAN HUMAN RESOURCES DEVELOPMENT PROJECT (EHRD)
PROJECT COORDINATING UNIT (PCU)

Ref. No. HRD/4/5124/02

DATE: 26 DEC 2002

To:
Zoba Anseba
Ministry of Education
Keren

Dear Sir/Madam,

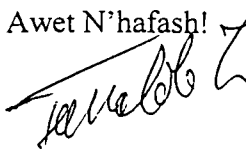
The bearer of this letter, **Ato Mekonnen Estifanos Teclu**, is one of the students placed by the EHRD Office at the **University of Western Cape** to do his Masters degree in Education.

Ato Mekonnen is presently back in Asmara to collect data/information for his thesis work titled: *"An Evaluation of the In-service Training Program for Elementary School Teachers in Eritrea"*. We have come to learn that, to complete his research project successfully, he would definitely need to have access to your organization's data/information base.

I take this opportunity to request you to assist him in his research endeavour.

I thank you for your time and kind consideration.

Awet N'hafash!


Tewelde Zerom, PhD.
Manager, EHRD-PCU
University of Asmara



cc.: Mehari Tewolde
Monitoring & Evaluation Officer, EHRD Project
University of Asmara

Mailing Address:

University of Asmara
P. O. Box 1220
Asmara, Eritrea

Tel:

291-1-119035
291-1-161926

Fax:

291-1-124300
291-1-162236

E-mail

hrdpcu@asmara.uoa.edu.er



UNIVERSITY OF ASMARA
ERITREAN HUMAN RESOURCES DEVELOPMENT PROJECT (EHRD)
PROJECT COORDINATING UNIT (PCU)

Ref. No. HRD/4/5123/02

DATE: 26 DEC 2002

To:
Zoba Debub
Ministry of Education
Mendefera

Dear Sir/Madam,

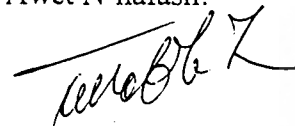
The bearer of this letter, **Ato Mekonnen Estifanos Teclu**, is one of the students placed by the EHRD Office at the **University of Western Cape** to do his Masters degree in **Education**.

Ato Mekonnen is presently back in Asmara to collect data/information for his thesis work titled: *"An Evaluation of the In-service Training Program for Elementary School Teachers in Eritrea"*. We have come to learn that, to complete his research project successfully, he would definitely need to have access to your organization's data/information base.

I take this opportunity to request you to assist him in his research endeavour.

I thank you for your time and kind consideration.

Awet N'hafash!



Tewelde Zerom, PhD.
Manager, EHRD-PCU
University of Asmara



cc.: Mehari Tewolde
Monitoring & Evaluation Officer, EHRD Project
University of Asmara

Mailing Address:

University of Asmara
P. O. Box 1220
Asmara, Eritrea

Tel:

291-1-119035
291-1-161926

Fax:

291-1-124300
291-1-162236

E-mail

hrdpcu@asmara.uoa.edu.er

ሃገረ ኤርትራ
ሚኒስትራ ትምህርት

دولة ارتريا
وزارة التعليم



THE STATE OF ERITREA
Ministry of Education

ዕለት 11/12/2002 التاريخ
Date

ቁ. መገባብ المرجع
Ref.

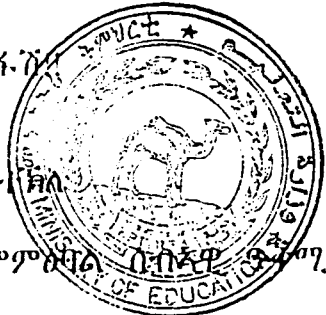
ናብ፡ ሓለፍቲ ክፍልታት ሚኒስትራ ትምህርት
ሓለፍቲ ኣብያተ-ጽሕፈት ጨንፈር ትምህርት ዞባታት
ሓለፍቲ ኣብያተ-ጽሕፈት ጨንፈር ትምህርት ንኡስ ዞባታት
ሓለፍቲ ኣብያተ-ትምህርትን ሱፐርቫይዘራትን

ጉዳይ፡ መጽናዕቲ ንምክያድ ምትሕብብኩም ምሕታት

መምህር መስከረም አሰመረኛ..... ሓደ ካብቶም ኣብ ደቡብ ኣፍሪቃ
ብደረጃ ማስተረይት ዲግሪ ትምህርቶም ዝከታተሉ ዘለዉ ኣባላት ሚኒስትራ
ትምህርት እዮ። ኣብዚ እዋንዚ ድማ ምስ ትምህርቲ ዝተኣሳሰረ መጽናዕቲ
ንምክያድ ናብ ኣርትራ መጸኢ ኣሎ።

በዚ መሰረት፡ መጽናዕቲ ኣብ ምክያድ ዘድሊ ምትሕብብኩም ክትገብሩሉ ብትሕትና
ንኣትት።

ግወታት/ኣ.ኣ.ሸ/.....
አብያተ-ም.ክ.ሸ/.....
ዳይሬክተር
ጨንፈር ምምህርት ቤት/.....



Appendix III

Interview questions for the INSET trainees

1) Practical arrangements of the INSET

- 1.1) Where was the training given to you?
- 1.2) Where were you accommodated?
- 1.3) How did the venue for the INSET affect your family and domestic responsibilities?
- 1.4) Where do you prefer INSET to be given to teachers? Why?
- 1.5) Do you think the duration of the INSET for unqualified elementary school teachers was long enough?
- 1.6) How do you assess the coordination of the programme?

2) Course materials

- 2.1) How do you assess the course materials of the INSET for unqualified elementary school teachers?

3) Course presentation

- 3.1) What comment do you have on your trainers' capacity to train teachers?

4) Practical value of the INSET

- 4.1) Why did you attend the INSET?
- 4.2) To what extent have your knowledge and skills acquired from the INSET enabled you to prepare and use of teaching aids?
- 4.3) To what extent have the knowledge and skills acquired from the INSET enabled you to prepare a lesson plan?
- 4.4) To what extent have the knowledge and skills acquired from the INSET enabled you to choose an appropriate teaching method?
- 4.5) To what extent have the knowledge and skills acquired from the INSET enabled you to manage class effectively?
- 4.6) To what extent have the knowledge and skills acquired from the INSET enabled you to assess your students' performance?
- 4.7) To what extent have the knowledge and skills acquired from the INSET enabled you to prepare lesson content?

5) Incentives/rewards

5.1) Did you get any incentive/reward after you completed the INSET course? If yes, what kind of incentive/reward?

5.2) In your opinion, should participation in INSET be accredited? If so, how? E.g. remuneration, credit towards study at higher institution, etc.

6) Do you have any other comment about the INSET?

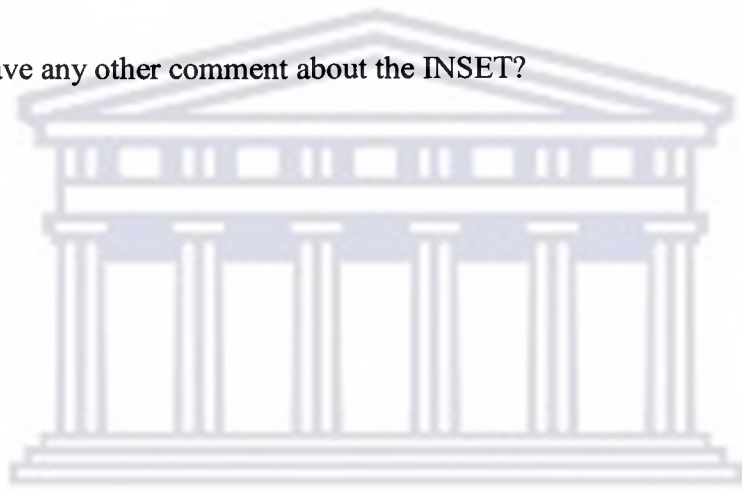


UNIVERSITY *of the*
WESTERN CAPE

Appendix IV

Interview questions for the INSET trainers

- 1) What did the course material consist of?
- 2) Where the teaching materials consistent with the needs of the trainees both with regard
to subject matter and methodology?
- 5) Do you think the duration of the INSET was long enough?
- 6) Where there any resource centres where trainees could consult books and other materials?
- 7) Do you have any other comment about the INSET?



UNIVERSITY *of the*
WESTERN CAPE