

**ADDIS ABABA UNIVERSITY
COLLEGE OF EDUCATION
SCHOOL OF GRADUATE STUDIES**

**THE CONTRIBUTION OF IN-SERVICE TRAINING PROGRAMMES FOR
THE PROFESSIONAL DEVELOPMENT OF GOVERNMENT GENERAL
SECONDARY SCHOOL TEACHERS IN ADDIS ABABA CITY
ADMINISTRATION**

By DEGUSEW TESEMA



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PROFESSIONAL DEVELOPMENT OF GOVERNMENT GENERAL SECONDARY
SCHOOL TEACHERS IN ADDIS ABABA CITY ADMINISTRATION**

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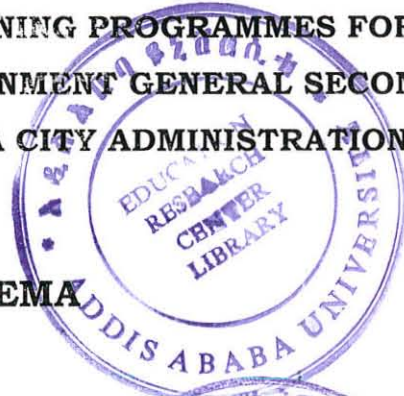
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Abbreviations

AAEB- Addis Ababa Education Bureau

CPD- Continuous Professional Development

ESDP- Education Sector Development Program

ESS- Education Sector Strategy

ETP- Education & Training Policy

INSET- In-Service Education and Training

MOE- Ministry of Education

OECD- Organization for Economic Cooperation and Development

TESO- Teachers Education Systems Overhaul

Abstracts

The study was done to assess the contribution of in-service training for the professional development of government general secondary school teachers in Addis Ababa city administration. A sample consisted of 180 teachers, 7 school principals and 3 sub-city education and training experts were selected using different techniques and made to provide information. To meet the objective of the study, descriptive survey method was employed.

To gather the necessary data, questionnaire and interviews were the main instruments employed. The data collected from the different sources were tallied, organized and analyzed using sample percentages.

The result obtained from the study revealed that majority of the teachers in the city administration participated in in-service trainings of various types. Accordingly, the trainings contributed to the professional improvements in areas such as improvements in lesson planning, classroom management, continuous assessment, employing active learning methodology in the classroom, preparation and usage of teaching aids, etc. Furthermore, quite a large number of teachers upgraded their qualification and got salary improvements as a result of their training. The findings further revealed that the summer course program is the major in-service training program to upgrade the qualification of teachers.

However, in-service training programmes like distance education were found to be least used by teachers to upgrade their qualification. Furthermore, the financial and material resources allocated and the time given for the in-service training was found to be inadequate.

Based on the findings and the conclusions made the following recommendation are made. In order to alleviate the problems of in-service programmes of different types, stakeholders at different levels (from school to Federal MOE level) have to play their roles. Adequate budget should be allocated. Sufficient time and convenient schedule for trainings have to be arranged. Especially for summer course students the time given and the course load have to be revised. In order to identify teachers who need in-service training assessment of needs very important. Besides, competent in-service training personnel have to be assigned. Furthermore, conducting an impact assessment has to be done in order to see the effectiveness of INSET programmes in the city administration.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

It is universally accepted that the quality of nations depends upon the quality of its citizens. The quality of its citizens depends in a critical measure upon several factors-home, inherited traits, attitudes of parents; financial support, buildings, books and equipment in schools; curriculum, the quality of teachers and method of instruction (Chaurasia, 1967:80). Among those factors that affect the quality of education the teacher is the most important one. Moreover, he mentioned that the efficiency of any educational system is governed by the adequacy of both members and competency of the teaching force (*ibid*). Undoubtedly the quality of teachers is determined by the provision of adequate pre-service and in-service education.

All teachers come to schools to carryout their work after completing their pre-service training given in teacher training colleges and universities. However, different scholars agreed that the pre-service training given is not sufficient enough to carryout their duties effectively. For instance, Goble and Porter (1971:22) stated that education is a rapidly developing field in which old ways of doing things are constantly replaced by new and better ways. Besides, Misner (1950:32) argued that conventional programmes of pre-service teacher education simply do not prepare for the complex responsibilities they are expected to assume. He also mentioned that the need for continuous improvement of teaching activity is not confined to beginning teachers. There is a considerable truth in the saying that 'twenty years of experience may mean simply that the mistakes of the first year have been repeated twenty times' (*ibid*).

These facts show that teacher education sees values of continuous and life long learning in order to adjust to the rapid pace of change.

In relation to this Chaurasia (1967:81) stated that:

Teacher education never ends. The good teacher goes on learning all the time, keeps abreast of all the new developments in his field and endeavours to feed his students from a fresh running stream and not a stagnant pool of water....A teacher can never truly teach unless he is learning himself. A lamp can never light another lamp unless it continues to burn its flame

The above points clearly show that the In-Service Education and Training (INSET) programmes for teachers, which is the focus of this study, is a crucial activity in the education system of a country.

In support of the above idea, Ansell (1992:2) in Rahel (2006:3) stated that in-service trainings are important in promoting teachers professional development as they are frequently designed to identify and exemplify various effective classroom techniques and teacher skills to promote better teaching and learning.

Moreover, in-service training is necessary and potentially powerful part of the continuing professional development of teachers...both longer, extended, accredited programmes and the short in-service courses have important contribution to make to teachers' intellectual and emotional capacities to provide high quality teaching (Day, 1999: 150 Cited in Rahel, 2006:3).

When we come to the Ethiopian education system regarding this reality, INSET has remained a challenging activity since the beginning of teacher education in the country. As Yalew (1991:115) cited in Haile (2001) stated that the number of teachers in our secondary schools who neither do have the requisite qualification nor assigned in the area of specialization is negligible.

Recently, the government gave due concern to teacher education and development programmes in the country. Regarding this, the Education and Training Policy (ETP) which was proclaimed in April 1994, treats issues related to teachers' qualification and in-service teacher education programmes. The ETP (1994: 21) stated that:

- i. teachers starting from kindergarten to higher education will be required to have the necessary teaching qualification and competency

in the media of instruction, through pre-service and in-service training;

- ii. the criteria for professional development of teachers will be continuous education and training, professional ethics and teaching performance.

Specifically, the Education Sector Strategy (1994:17) stated that in-service training gives emphasis to continuous upgrading (qualifying) of teachers who have already joined the teaching profession. Moreover, Continuous Professional Development (CPD) is also designed for teachers to update themselves with new outlook, approaches and policy direction as specified in Teacher Education System Overhaul (TESO) in 2003:23 (in Rahel, 2006: 3). For this purpose, recently, establishing teacher training colleges, upgrading the ones that already existed and supporting those which are run by private sector is underway (ibid).

Though different strategies are designed and efforts are being made at national and regional level, to achieve the above objective, there are still different problems in the teacher education of the country. Hence, conducting a research on teachers' in-service training programs and investigating the current status of the training in Addis Ababa city administration made the student research to focus on.

1.2 Statement of the Problem

Teaching as any other professions requires professionals in order to provide quality education. Teachers to be professionals need to possess the three types of knowledge-general, special and professional and it is the last type of knowledge that makes any person professional (Nigussie, 2002). Leul (2006:3) indicated that knowledge of subject matter and mastery of professional knowledge are determinant for effective teaching. Moreover, teachers' professional knowledge can be accumulated in both pre-service and in-service training programmes.

It is obvious that INSET programmes are helpful for both the Continuous Professional Development (CPD) of teachers and for the overall improvement of the quality of education.

In relation to this Goble and Porter (1977:14) stated that the teachers' on job are in need of in-service training, either to remedy deficiencies that they have discovered in their professional skills, to develop their potential competence in some specialized field, or simply to raise their level of all rounded capacity to keep pace with their increasing maturity and adjustment. Moreover, the development of strong in-service education program creates the opportunity for a much needed rapprochement between the teacher and the school (ibid).

Thus, due attention should be given to teachers' in-service training programmes in order to improve the teaching learning process.

According to MOE (2002) in Leul (2006), the current in-service secondary teacher education of Ethiopia accordingly, includes professional courses that will enhance teachers' professional knowledge in the training package. These courses included in the program to provide practical experience of the psychological, sociological and educational knowledge required by effective teachers. The majority of professional courses are supposed to be offered on distance mode of delivery unlike other major and minor area courses in in-service secondary education (ibid).

Courses of in-service teacher education should be relevant for teachers' identified needs, and teachers should be actively involved in the planning, execution and evaluation of the training (Leul, 2006:4)

However, according to Tomilson (1998) in Rahel (2006:5) "there are still different problems which arise due to various reasons on the existing situation. Some of the problems lie the inability to apply all what the participants have learnt with in existing parameters of syllabus, examination, materials, official expectations, class size and other practical constraints."

Different researchers, for instance, Haile, (2001); Hailesilasie, (2004), Rahel, (2006) and Leul, (2006) had made their study on teachers' in-service

training programmes in different regions of the country. Their main focuses were mainly on problems and status of INSET programmes. However, there is scarcity of studies, which focus on the contribution of INSET programmes for the professional development of secondary school teachers in Addis Ababa city administration.

In light of the above points, this study was made to focus at investigating the contribution of INSET programmes for the professional development of secondary school teachers in the region. To this end, the study is aimed at addressing the following basic questions:

1. What are the major INSET programmes arranged for secondary school teachers in the city administration?
2. What kinds of developments are observed on the secondary school teachers of the city administration as a result of the in-service training programmes?
3. Do INSET programmes for teachers in the region contribute to the overall classroom management in their teaching?

1.3 Significance of the Study

This research may have a great significance in the following ways

1. It shows the major contribution of INSET programmes for the professional development of secondary school teachers in Addis Ababa city administration;
2. It Points out specific strengths and weaknesses of planning, organizing and evaluating INSET programmes and enhancing the strengths and minimizing the weaknesses by the planners;
3. It may serve as a starting point for other researchers who are interested to do their research in this area;
4. This research paper would serve as a reference material for readers.

1.4 Delimitation of the Study

The study limits itself mainly to the contribution of in-service training programmes for teacher's professional development.

The study is conducted in Addis Ababa city administration. The rationale behind is the concentrations of schools and teachers are higher in the city administration than in other regions and studying the contribution of in-service training programmes is possible where there are adequate samples.

1.5 Limitation of the Study

The study has its own limitations. The research focused on Addis Ababa City government secondary schools only because of financial and time constraints. The other limitation of this study is absence of up-to-date literature that could provide valuable information on this topic. Lack of cooperation to give their responses to questionnaires from some teachers was the most significant challenge of this study.

1.6 Operational Definitions

For the purpose of clarity and consistency in this study, the following terms are defined.

- 1. In-service education and training:-** refers to 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 effectively (Bolam, 1980: 3 cited by M. Eraut).
- 2. Professional development:-** signifies any activity that develops an individual skill, knowledge, expertise and other characteristics as a teacher. (Barker, 1996:39 cited by Conco).
- 3. Profession:-** an occupation usually involving relatively long preparation on the level of higher education and governed by its own code of ethics (Good, 1973:440 cited by Haile, 2001).

CHAPTER TWO

REVIEW OF RELATED LITERATURES

2.1 The Concept of In-Service Education and Training/INSET/

In-service training for teachers is the training given for teachers either to refresh or to certify them. According to OECD (1998:1), INSET is a form of practical training, short courses or longer formalized programmes such as the further diploma in education, aimed at upgrading the skills and qualifications and sometimes salaries of unqualified or under qualified teachers. However, INSET has been conceptualized as the ongoing professional development of teaching practitioners. In terms of this scenario, a good teacher is regarded as a self-motivated learner whose professional development goes beyond traditional development to include reading, curriculum development activity, and research and conference involvement (ibid). The definition given by Bolam (1981) goes with the above definition. He defined INSET as those education and training activities engaged by primary and secondary school teachers and principals, following their initial certification, and intended mainly or exclusively to improve their professional knowledge, skills and attitudes in order that they can educate children more effectively.

The definitions indicate that the main aim of an INSET program for teachers is to enhance the professional knowledge and skills of unqualified teachers or under qualified teachers that leads to upgrading and salary improvement.

“INSET should be seen as providing access to resources would include not only materials but also the services of consultants and specialists and the engaging of teachers to work in such areas as curriculum development, new learning methods, and educational technology” Goble and Porter(1977:164) .

From this definition we can understand that INSET programmes for teachers need not only be material resources but also professionals that will help the teachers to develop them professionally.

Adams (1975:37) use the term INSET to mean.

The development of the individual which arises from the whole range of events and activities by which serving teacher can extend their personal academic or practical education, their professional competence and their understanding of educational principles and methods.

This definition clarifies the assumption of many people that relate INSET programmes of teachers with attending formal courses. He supports this issue by noting that a serving teacher is open to many influences. He may be influenced by;

- his pre-service (initial) training;
- colleagues in his own school or elsewhere;
- advice from those senior to him and classroom discussion;
- watching experienced teachers in action and working with them;
- his personal reading and study;
- children he teaches;
- consultants from outside the school;
- Courses, workshops, discussions and conferences etc will contribute to his development.

According to him, professional development, therefore, is a business of continuous growth. In one sense, it is something each teacher must do for himself. At the same time it is clear that other people can do a great deal to help the individual teacher to grow professionally.

“INSET programmes for teachers may be voluntary or mandatory and may or may not be accompanied by a raise in pay and promotion prospects” (ILO, in Haile 1992:41).

The above points indicate that some INSET programmes for teachers are optional. These types of trainings are attended by only some teachers who need to attend it. While other training programmes are compulsory, this types of programmes are attended by the whole staff. Moreover, some training programmes followed by salary improvement, while other training programmes may not be followed by rewards and promotion to higher level.

“The duration of INSET may vary from one hour training to a couple of years depending on the nature of the program” (Elani,1997 in Rahel,2006).

According to Husen and Postlewhaite (1994) in Rahel (2006) INSET can be divided in to four categories based on the aim of the program as follows:

- a) INSET for unqualified teachers (mainly certification);
- b) INSET to upgrade teachers;
- c) INSET to prepare for new roles, such as principal or teacher educator;
- d) Curriculum related INSET particularly when there are curriculum changes in the system, or when teachers require some form of refresher courses.

From the above points, it can be seen that INSET programmes mainly focus on either upgrading their qualification and/or to update their knowledge so that teachers may gain the needed skill in their field.

In general, an INSET program of teachers is a crucial activity not only for continuous professional development of teachers but also for over all improvements of students learning, the quality of education and school improvement.

2.2 Historical development of in-service Education and Training

Different scholars agreed that INSET started recently and it was on overlooked activity for a long period of time (Chaurasia 1967).

According to Tyler (1971:13),

The development of INSET is connected with the Second World War, followed by a sharp increase in the birth rate, created conditions in which there was an acute shortage of teachers. INSET during this period largely offered courses that would enable teachers to fill the gaps in meeting certification requirements

In line with this, Adams (1975) mentioned that the last three decades of the nineteenth century, when England became a predominantly urban society, saw a spot of educational inquires, legislation and reform accompanied much

public discussion of the curriculum at all levels and the emergence of a variety of pressure groups. The social dislocation of the First World War was followed by the relative success of the progressive movement in education which profoundly affected some teachers in both the private and public sectors. We are once again witnessing on other such era of intensified efforts to influence the schools through the teachers at a time of greatly accelerated social change.

Though particular periods can be highlighted in this way, it should not be forgotten that outstanding teachers have always striven to influence other with whom they come in contact and have written their advice to achieve a wider impact. Roger, Ascham, Richard Mulcaster, Charleshole and John Drug are examples as important in earlier times as Friedrich Froebel, John Dewey, Maria Montessori or A.S Niell in more recent times (ibid).

The above point shows that conscientious teachers have always made efforts to up-date knowledge of their subject matter.

On the other hand, Morley (1994:1) mentioned that fifteen years ago, in England a short discussion paper entitled making INSET work was circulated to schools by the department of education and science. This asserted that in-service education for teachers was at a take- off point in the country.

Despite the significant growth and diversity of INSET provision during the 1970s` the opportunities available to teachers were seen as predominantly meeting the needs of enthusiastic individuals and peripheral to the school. As to the study of LEA (local education Authority) short courses in 1979-80 concluded that there would seem a need to move forward from benevolent opportunism. Where some teachers attend some course of interest to them to wards more systematic attendance at courses designed to fit a policy for rational curriculum development which has the support of the school.

Moreover, conscientious teachers have always made efforts to up-date their knowledge of the subject matter they have thought.

From the above points one can understand that INSET programmes for teachers were widely applied after the Second World War in England and other countries.

In U.S.A, according to Abdal- Haqq (1998:1-3), quoted by Hailesilassie, factors that initiated the need for Continuous Professional Developments (CPD) were:

- i) the coming of rival countries to the lead in scientific and economic competition, such as the launching of the sputnik satellite by the soviet union,
- ii) the issues of social justice and pragmatism. Social justice advocates were worried about the gap in learning acquisition between the poor and the rich. Less privileged children achieved less and this was not healthy. Pragmatically, children from poor families, it was held, would end up in welfare roles, drug addiction, premature death, prison, or joblessness.

Hence, the above points indicated that various factors contributed for the development of in-service education and training programmes of teachers in different countries. Moreover, INSET program for teachers is widely spread throughout the world after the Second World War.

2.3 In-service Education and Training in Ethiopia

Different researchers had studied about the INSET programmes in Ethiopia at different times. For instance, Yalew (1998:387) argues that in-service education in Ethiopia started in the 1950s at the University College of Addis Ababa, which was then the only institute of higher education. According to him, the college began offering courses in law and engineering as early as the academic year 1952-53. Then, in the late 1950s (Solomon, 1970:57 cited by Yalew) programmes in social sciences like history, geography and education were included. At the initial stage, the INSET programs were in line with and under the control of the regular pre-service program. Later on, when the Hailesilassie I university (HSIU) was inaugurated in 1961/62 a separate department as university extension was established and started offering continuing education to adults at diploma and degree levels during the evenings .

On the other hand, according to Abebe (1980) as cited by Yalew, “in-service program for teachers started in 1958 as a joint undertaking by University College of Addis Ababa and the MOE initially. The primary objective of this program was to up-date and to upgrade the professional knowledge and skills of secondary school teachers”.

“The in-service teacher education program between 1950 and 1974, which is up to fall of Hailesilasie I, was characterized by small annual intake and thus inability to keep pace with the growing demand of qualified teachers” (Yalew, 1998 and Tilahun, 1990 in Luel, 2006:12).

Besides, as Tilahun (1990) concedes,

the programme between 1958 and 1974 indirectly contributed to the depletion manpower of elementary schools by facilitating the economic, educational and social mobility of the graduates. In 1960s, for example with the rapid development of secondary education, it was these elementary school teachers who were assigned to junior or even senior levels.

However, caught up in the revolutionary fever, in 1975 the summer in-service teacher education programmes were discontinued by regarding the curricula not to be socialist oriented and poor service at that time (Tilahun, 1990 in Luel, 2006). This INSET program nevertheless revived in 1978 after decision made by Faculty of Education of the Addis Ababa University and MOE, by making the program non-credential except for junior secondary school teachers. The same decision also dictated the junior in-service curriculum to be patterned after pre-service curriculum, which was offered by Kotebe teachers' college (ibid).

Like the previous INSET programmes, the summer in-service program which was declared in 1978 by MOE also suffered from irregular and small intake compared to the number of teachers in the senior secondary schools. Moreover, discontinuities of the program also worsening the supply end like when it was shutdown in 1985 and when there was no new admission in 1987 (ibid).

Other problem of INSET between 1975 and 1990 according to Tilahun, includes absence of special attention by the majority of institutions to make the program “custom-made” in content, methodology and mode of delivery and courses tend to be taken as though the participants were full time students .

Generally speaking, absence of special identity as it was a copy of pre-service program, irregular and small number of annual intake which is regarded as “a small drop in ocean” (Tilahun, 1990 in Luel, 2006:13) characterizes the history of INSET in Ethiopia. This makes the program inefficient in being responsive to the desperate needs of the educational system- the need for qualified teachers (ibid).

The new package which combines distance education and face to face instruction was introduced in Ethiopia to make in-service teacher education program responsive to the high level of demand of qualified teachers (Luel, 2006:14) such mode of delivery, according to Teshome (2001) by citing Obanya, Shabani and Okebukola (1999), could be regarded as dual mode of delivery (ibid).

However, with the overhaul of teacher education in Ethiopia, the current in-service teacher education is revised in 2003. This revision, nevertheless, keeps on using the combination of distance mode of delivery and face-to-face sessions. The final document of Teacher Education System Overhaul (TESO) in 2003 has mentioned some specific issues related to INSET. Some of them are:

- Absence of ongoing effective monitoring system.
- Absence of systematic progression from diploma to degree level in the course contents.
- Absence of practical experience of teaching methods.
- Lack of relevant experiences/competencies in modern preparatory methodologies among teacher educators.
- Though there is a great depth of subject knowledge there is no parallel expertise in writing materials for distance education among those who are responsible to do so.

- Absence of enough opportunity for some face-to face support, for courses offered in distance (only one too short support session for each year).
- Unreliable and coordinated schedule for tutorials and examination.

Though there are different problems in the current practices of in-service teacher education, the MOE trying to solve these problems and give opportunities to all teachers throughout the country to upgrade their qualification through summer course programmes. The summer course programmes has been given in the teacher colleges and universities such as Addis Ababa, Bahir Dar, Jimma, Dehub, Mekele and Haromaya universities.

2.4 Benefits of In-Service Education and Training

INSET program provides many benefits not only for teachers development but also for the over all improvement of schools and the quality of education.

Misner (1950:32) described:

Conventional programmes of pre-service teacher education do not prepare beginning teachers for the complex responsibilities they are expected to assume. In view of the current and probable future in-adequacy of pre-service education it is imperative that well-planned in-service programmes be provided to bridge the inevitable gap. Not to do so is to expose pupils to a professional in-competency that is wholly unjustified. Teachers, who are failing to grow on the job whatever the extent of their experience, can not be expected to serve adequately tomorrow's citizens.

Moreover, Goble and Porter (1971:156), argue that “it is becoming obvious that longer and more complex period’s initial training would not enable teachers to cope more effectively with the serious and recurrent problems”. Further more Conco (2004:7) mentioned that INSET is necessary to reorient teachers to new goals and values, to prepare them to cope with curriculum change, to train them in new teaching and learning methods, and provide them with knowledge and skills to teach new learning areas.

According to Lippit and Fox (1971:149), “Pre- service education is only the beginning of professional training. Professional development must continue

throughout a teacher's career if he is to keep up with changing conditions and new knowledge".

Besides, Meade in Rubin (1971:214) states that in- service activities appear to serve three functions.

1. First of all, they provide a method for arbitrating advancement on the salary schedule. In the absence of other criteria, academic units are often the only basis for rewarding teachers;
2. They are a route out of the classroom, often promoting to some other capacity the very teachers they are purporting to help become more effective;
3. They are temporary rescue missions, instigated to help teachers overcome a pressing crisis, perhaps the introduction of a new and different set of text -books.

According to Conco (2004:58),

if training programmes are properly designed, they can create an effective workforce and a sound institutional image. Teachers may improve their skills and knowledge in any of the eight learning areas, namely literacy language and communication (LLC), mathematics literacy, mathematics and mathematical science (MLMMS), natural science (NS), Human and social science (HSS), art and culture (AC), Life Orientation (LO), economic and management science (EMS), and technology (T)".

On the other hand, according to Greenland (1983:8), "INSET programmes can be the means of certifying the unqualified teacher, upgrading the teacher with low qualification and preparing him to a new curriculum".

The above points show that the major objective of INSET programmes for teachers are certifying unqualified teachers and upgrading their qualification, and/or updating them to new information.

The other benefit of INSET mentioned by Harrison and Gowin (1958:250) is that "it is re- emphasized when we consider the large number of beginning teachers who are discouraged from continuing in the profession by the

experiences of their first year. The tremendous loss to the profession their manpower has forced school administrators and others to seek better methods of preventing discouragement and failure in beginning teachers”.

Thus, INSET programmes (specially the induction program) are very useful in preventing beginning teachers from losing their job or profession. Because the induction program help them in acquainting the school environment and how to manage students’ behavior in the classroom. In relation to this, Potts (1998:130) states that a properly inducted teacher is likely to get the teaching profession enjoyable and is likely to grow successfully in his/her career.

“Among the more specialized functions a well developed system of INSET will be that of preparing for and enabling teachers to change roles with in the education service, to move into administrative positions, to retain those entering teaching from other jobs, to develop inter- professional programmes and to deal with shared problems, and to sustain research and innovation” (Goble and Porter, 1977:170-71).

Another specialist function of INSET which is described by Goble and Porter is to enable the teacher to go into one or more of the special roles that are acquired of teachers in the rapidly changing world of the school. Thus, training programmes for experienced teachers must be readily available for those who wish to educate special groups of children such as those whose educational development limited because of physical or mental handicap, emotional maladjustment or limitations in the social and economic environment.

To Dilts (2002:1) as cited in Conco (2004) holds that training programmes help teachers to:

- be better able to handle difficult pupils;
- develop a greater understanding of different learning styles;
- enhance learners’ self- esteem and therefore and their desire for positive reinforcement;

- manage their own frame of mind and emotional state better, resulting in reduced stress and greater job satisfaction;
- become more positive about learning, transferring this attitude to the learners;
- become more creative, imaginative and stimulating in their presentations.

Regarding the rationale for INSET Husen and Postlewhaite (1994) Eraut (1995) in Luel (2006:9) indicate distinct yet complementary rationales based on different researchers. The rationale that has been used to explain the importance of INSET by writers mentioned above could be summarized as:

a) Human Resource Development

This rationale involves around two major concerns.

- I) ensuring an adequate supply of appropriately trained and prepared people for all positions and
- II) Maximizing the potential of all current personnel.

b) Maximizing of planned change

This rationale is related with the interest of the system to prepare personnel who will implement any planned change.

c) Self- Development by School and Teachers

The rationale for self –development is broader and basis itself on three factors that include,

- I) School and teachers will be more likely to commit themselves to change when they have initiated the change themselves;
- II) These changes become more institutionalized when there are better prepared to plan and implement it;
- III) Needs and priorities will be identified more effectively at school level and thus the plan to change will respond to realistic rather than the perceived needs.

In general, INSET programmes for teachers have various benefits not only for the teacher but also for school improvement. Hence, it is an escapable activity in the education of a country.

2.5 Barriers to INSET Programmes

Different authors mentioned the different barriers that inhibit INSET program for teachers. For instance, Rebore (1998:16) cited in Conco (2006) identifies the following possible barriers to INSET program:

- failure on the part of teachers to understand the intention with a program;
- resistance among teachers who feels that proposed changes are a threat to how they normally do things;
- lack of expertise on the part of the staff development functionary which may pose a problem in the design, delivery and evaluation of a program;
- refusal to attend workshops or meetings convened by people whose expertise is doubted;
- programmes that appear to undermine teachers' creative thinking;
- lack of commitment on the part of the school management team and teachers;
- Lack of time allowed by the principal or school management team;
- lack of opportunity to implement what has been learnt in the program;
- fixed school timetables;
- mismatch between identified individual and group needs and the staff development programmes;
- unavailability of appropriate resources;
- lack of funds to initiate or attend courses, workshops, seminars and learning activities;
- a negative relationship between the staff development practitioner and teachers.

On the other hand, Bush (1975: 43) argued that one of the most significant problems of INSET program is relating in- service to pre-service training. According to him experienced teachers are extensively used in the induction of new teachers. Besides, the experienced teachers in the school

should work together with college and university scholars to overcome the above problem.

Vonk (1995) as cited in Luel (2006:10) indicates the following points as limitation of INSET in Western Europe.

- There is lack of clarity on the part of the participants;
- Many INSET activities do not target the main goal of improving the professional competence of teachers;
- It is too often the case that INSET providers transmit the knowledge and skills they have, regardless of their relevance to the recipients;
- There is a lack of insight into the process of teacher professional development and teachers' professional learning.

Another research by Kieviet (1990) explained that in Netherlands has revealed some challenges, which the writer termed as "bottleneck", of INSET. These include:

- Existence of little knowledge about how to realize INSET in an efficient and effective way;
- Absence of much knowledge and experience with regard to the design and organization of large scale INSET projects;
- Insufficient preparation of teachers training instructors and lecturers which are charged with in-service tasks;
- Insufficient correspondence between demand and supply of the program;
- The problematic turning between training institutes and the various institutions in the support of the structure;
- Lack of motivation on the part of the teacher (ibid, p.11).

Hence, the above points show that the major barriers that influence INSET are :lack of available resources, lack of motivation on the part of the teacher, lack of expertise, lack of funds, fixed time tables, etc.

2.6 Planning and Organizing in- Service Education and Training Programmes

2.6.1 Planning in- Service Education and Training Programmes

Planning is an important part of the in-service program for teachers.

“According to teachers, administrators and university professors, a major defect in in-service education programmes has been poor organization and planning (Joyce and Peck, 1977). The design of in-service training programmes is the focus of the planning stage where the goals and program selected in the previous stage are translated into detailed, long- range plan for staff development. During this stage the goals are refined into specific in-service objectives; a need assessment is conducted, in-service activities are planned; resources are identified; and the tentative design- the who, how, what, and where, of the training and implementation stages are identified (Wood and Thompson, 1981:68).

Conco (2004:58) states that “if training programmes are properly designed, they can create an effective work force and a sound institutional image”.

In relation to this, Hailesilasi (2004:42) states that carefully planned INSET activities will be successful, while less systematic and inadequately planned programmes are likely to fail. Well planned INSET bases itself on critically identified needs. Hence, need assessment is crucial activity in the planning stage of an INSET program for teachers. Moreover, costs site activities, success indicators and evaluation mechanisms will be determined at the planning stage.

According to Marzely (1996:25) actual planning for in-service training entails eight steps. These are:

- 1) assessing needs;
- 2) revising programmes addressing needs;
- 3) assessing costs and benefits of applicable program;

- 4) developing contract for service;
- 5) scheduling and advertising the in-service;
- 6) preparing the in-service site;
- 7) evaluating the in-service;
- 8) monitoring maintenance and effect.

Furthermore, training planners and coordinators need to know about the characteristics of effective INSET programmes because effective teaching depends on effective INSET programmes.

Wood and Thompson (1981:71) states that plans for INSET activities- workshops, visitations, graduate courses, practicum- should include:

1. opportunities to build relationships and communication among the participants;
2. time when participants can interact freely and share what they are learning;
3. pre and post assessments; and
4. learning options to accommodate differences in achievement and learning style uncovered in the need assessment and differences in competence detrimental in the pre assessment

According to them the plan should identify the actual materials, in – service staff, consultants, facilities and equipment that will be used in the workshops or training activity.

Sharam (2002:1) as cited in Conco (2004) argues that workshop planners are required to take into consideration the following four prominent features of an effective teacher education program:

- **Experiential learning:** - this includes experience (activities and exercises), reflection on experience (personal and professional), conceptualization (professional terminology) and planning (application of experience, reflection and conceptualization). “One of the essential features of effective in-service education is the opportunity to participate in simulations or experienced learning. Experiential learning begins with

an examination of different examples of the intended learning” (Wood and Thompson, 1981:76)

- **Mastery of specific skills:** - this includes skills of classroom management, skills of the implementation of classroom methods, how to observe groups, orient them to group work, lead whole class sessions after group work, intervene to help group work, develop a group work activity/ lesson, teach group work and process skills and skills of analyzing and evaluating implementation, and develop criteria for selecting a classroom.
- **Coordination between the training setting and the classroom:-** this shows that the arrangement of the classroom setting so as to apply what has been learned in INSET programmes.
- **Faculty collaboration in planning and designing a program’s goals and methods.** This includes the identification of the actual training needs and development areas among the participants, exploration of skills of training teachers in cooperative learning, development of strategies and techniques of reflection and self analysis, and learning to use virtual learning tools for own professional development.

Moreover, according to Sharam (2002:1) quoted by Conco facilitators should ask the following questions:

- What kinds of activities are suitable for the beginning of the workshop?
- Should there be any particular order in the presentation of activities (exercises)?
- How strictly should the facilitator stick to the types of activities planned?
- Who determines the academic content of the activity?
- Should theoretical considerations determine the choice of activities? (Activities that highlight the teachers role, the learner’s role, classroom management, listening skills, etc. should be considered)
- Is there a recommended order of activities that generate reflection?
- What different ways are there to conduct a workshop?

- Should the facilitator prepare a specific list of concepts pertinent to assessment? If so, should the activities be chosen to suit the concepts and introduced in the same order?
- How should the facilitator organize the planning (application) of classroom activities?
- What are the main principles that should guide the facilitator?

Besides, “staff development policy is important because it motivates the staff and makes them feel valued in their job. To put this into practice schools need a practical staff development plan which includes the commitment of resources and wide spread discussion of priorities” (Bradley et. al 1994:241).

Teachers will have little difficulty in recognizing how their own continuing professional development will contribute to the growth of the school. Equally the school and the individual will benefit from the consideration, not of isolated INSET experiences, but of a planned development for each individual (ibid).

Here, individual and school needs are identified by using different techniques in order to fill the gaps between the existing and the expected need in the future.

Moreover, an INSET planner needs to consider the overall situations of the school before planning. According to Bardley et.al (1994:12), “A school context (size and stability of its staffing, the heads leadership style, the school ethos and culture, and the availability of resources) contribute to determine the shape and success of the staff development program, quite apart from any external influences. The staffing profile affects the ability to draw on in- house expertise and the need to access external support. Age, gender, career cycles, ambitions and staff morale all play their part as does the nature prior INSET experience”.

The above point shows that the such as location, size, school culture, ethos, availability of resources, etc should be considered at the time of planning of INSET programmes for teachers.

2.6.2 Organizing an in- Service Education and Training (INSET) Program

Various scholars list the common INSET activities, more or less, in a similar way as college credit courses (as part of diploma or degree program), workshops, seminars, teachers' meetings, visitation to other schools or institutions, lecture series, travel by teachers, group conference, participation in the evaluation of a school program, participation in the experimentation programmes, orientation program, committee work and the like (Harrison and Goin, 1958; Main, 1985; and Smith et. al ,1966 cited in Haile, 2001).

According to Goble and Porter (1977:160), in most countries the ultimate responsibility for the organization and financing in- service education appears to rest with the Ministry of Education. In such countries as Bulgaria, Hungary, Ukraine, and the USSR full government responsibility has always been a feature of their education in collaboration with teachers' organizations and the teachers themselves. While in other countries, in particular, Australia, Egypt, Ethiopia, Finland, France, Kuwait, Nigeria, Norway, Sierra Leone, Sweden, Switzerland and the United Kingdom further education is a government responsibility (ibid).

Therefore, the above points show that the organization of INSET is the responsibility of MOE in some countries, while in other countries it is the responsibility of both MOE and teachers' organization and the teachers themselves.

However, it is clear that the aim of INSET program is either to update or to upgrade the qualifications of teacher while doing their work.

Goble and Porter (1977: 159) mentioned that in more developed regions with static or decline birth rate the central problem may be to refresh and update an aging, conservative teaching force. On the other hand, in less-developed with a rapid growing population the urgency of the need for new teachers may be inevitably shorten the period of initial training and require the use designed programmes for the individual learning such as the multimedia

approach in Iran and Sudan. As it is mentioned above, the main objective of the organization of INSET program for teachers in developed countries is updating/refreshing experienced teachers, while in less developed countries focused on certifying unqualified teachers with less pre-service training. According Ware (1992:42) cited in Haile (2001), "it is accomplished not only by multimedia approach but also by extended course work leading to formal qualification (higher qualification than the teacher currently holds, or thorough workshops, seminars, and short courses of both limited duration and content".

Extended courses may be provided through residential programmes at colleges and universities which teachers attend during vacations or study leave of some kind through no- residential programmes held in evenings, weekends, or vacations, or through distance learning opportunities including correspondence courses, and/ or radio and TV programming (ibid).

The task of organizing INSET programmes is not limited to schools only. Many scholars argue that the task needs to be organized at different levels. Goble and Porter (1977:15) states that "in all countries four levels of operation may be defined: In- service education functions in response to national, regional, institutional and personal needs".

Hence, it is understood that INSET programmes can be organized at national, regional, institutional and personal levels.

However, "in organizing INSET programmes for teachers polices and at school level need to be in line with regional policies and strategies" (Hailesilasie, 2004:41).

2.7 Guiding Principles for in- Service Education and Trainin

Although it is impossible to formulate universally accepted principles of INSET, several scholars proposed guiding principles of INSET. According to Misner (1950:33) the following INSET guiding principles are summarized as follos:

What is done in an INSET program should be decided cooperatively and democratically

The effective operation of an INSET program demands a high level of interest and enthusiasm on the part of the teaching staff. Experience has demonstrated quite clearly that teachers will spend time and effort in the improvement of educational practices to the extent that they have the opportunity to participate in planning and evaluating what is done.

A good INSET program requires skillful and extensive planning

The determination of what is to be done in the program requires extensive evaluation and the development of long- range plans which seek to place first things first.

Leadership in INSET program is the function of all individual who are willing and competent to exercise it.

A comprehensive INSET program will include study and research activities that range from consideration of the problem involving beginning reading to the development of plans for a new school building. Within such a wide range of activities many individuals will have significant contribution to make. In planning the INSET program, it is important, therefore, that every effort be made to discover and utilize leadership abilities, wherever they may exist.

The effective INSET Program will progressively involve all Individuals who are directly or indirectly concerned with operation of the school.

On the other hand, Harris (1980:30-32) and Jangira (1995:256) quoted by Haile (2001) proposed the following guiding principles for INSET.

- All personnel within a designated trade organization or operation unit should provided opportunity for in service education;
- Time frame normally allocated for INSET programmes should be part of the normal workload:
- Training should be continuous, not just a 'one time' course;

- Client should have opportunities as planners, designers, managers, presenter and educators;
- The location selected for training should reflect training requirement rather than preferences;
- Training should be provided in a situation as close to that of the workplace as possible;
- Special incentives should be provided when activities are beyond the normal workday or academic year;
- A planned, systematic evaluation effort should be part of any major program. In other words, both short and long term evaluation effort should be planned (ibid).

2.8 Evaluation in In-service Education and Training (INSET)

Programmes

“Evaluation is the last and the most important phase of an INSET program. It focuses on determining the extent to which the training activities have met the stated objectives” (Conco 2004:50). “Designing mechanisms to insure implementation of activities according to plans is necessary” (Hailesilassie 2004:46). Moreover, evaluation of an INSET program helps to show whether the training programme leads to teachers’ professional development that is, the upgrading of teachers qualification, updating their knowledge, improvement of their salaries and overall professional growth of teachers.

In relation to this, Hailesilassie (2004:47) states “Evaluation helps to ensure reflection, collegiality and accountability. It shows what knowledge skills, ability and attitudes yield from the training program”. It also shows whether programmes are cost effective, what impact they have for succeeding generations and whether they are worthwhile.

According to Duke and Corno (1981:93) the evaluation component need to provide information about:

1. The overall condition of the staff development system (the environment created to facilitate professional growth).
2. The Adequacy of the processes being used to generate, govern, and maintain the system.
3. The effects of specific training trusts on participants, the school and children.
4. Side effects, both positive and negative, on participants and on the organization.

Moreover, evaluation requires setting performance indicators, evaluation methods, comparing performance with standards and taking corrective measures (Sims 1993:94)

Apart from decision makers, participants could also be asked to evaluate the program. This evaluation could be based on the program content, the manner in which it has been organized, the time that has been used, the venue where it was presented, the manner of presenting it and the learning points or experiences of the participants” (Conco, 2004:52).

In conclusion, “there is a need for an open and supportive climate for evaluating staff development programmes” (Bardley, 1991:125). Thus, principals or staff development committee may have to a conducive environment or climate in which teachers’ learning and development are not only supported, but stimulated (Emerson and Goddard, 1993:117 in Conco, 2004:53).

According to Woods and Thompson (1981:82) “the evaluation data collected in the training stage are both formative and summative. Throughout the training, formative data are collected to determine workshop participants’ progress toward objectives, the effectiveness of the learning experience, and the needed change in the in-service activities. Data are also collected to determine the overall effect of the workshop on participants and the extent to which the in- service plan was actively implemented. The summative data should, include

measures of cognitive, behavioral, and attitudinal change in the participants related to the objectives of the workshop”.

2.9 The Efficiency and Effectiveness of INSET Programmes

The efficiency and effectiveness of in-service programmes for teachers have to be measured using different techniques. According to Bradley (1994:238) the efficiency of INSET is measured in terms of handling large numbers at minimum cost. It is possible to offer efficient INSET when dealing with national initiatives and large number of teachers, and to make it effective, provided considerable thought is given to the organization and structure of the experience and to relating it to the existing context of the school. Where large amounts of information or the wide spread introduction of new skills and competencies are concerned, efficiency is an important consideration. The major question however, is whether efficient INSET is also effective (ibid).

When we ask questions about effectiveness of in-service experiences we go beyond concern for the cost of the enterprise or the efficiency of its delivery and address more fundamental issues related to changes in thinking, values and beliefs of the participating teachers and to the effects of their experiences on the learning opportunities provided for children (ibid)

The effectiveness of INSET takes time to be achieved. Effectiveness relies on collaboration and support among staff and stakeholders. Effective INSET leads to teacher development. Moreover, Conco (2004) argues that the professional development of teachers is a form of adult learning and providers of INSET need to recognize that adults learn in a variety of styles. Short training sessions can gravely cater for this variety of learning styles amongst the participants and are ineffective because they are ill- suited to many members of the audience (ibid)

Since teachers are adult learners the training methodology used for them should be learning by doing. Vella (1994:2) cited in Conco mentioned the following 12 principles of effective adult learning.

- Need assessment (participation of the learner in naming what is to be learned);
- Safe teacher- learner environment;
- Sound teacher- learner relationship;
- Careful attention to sequence of content and reinforcement;
- Praxis (action with reflection or learning by doing);
- Respect for learners as subjects of their own learning;
- Cognitive, affective and psychomotor aspects (ideas, feelings, actions);
- Immediacy of the learning;
- Clear roles and role development
- Teamwork (using small groups);
- Engagement of the learners in what they are learning;
- Accountability (roles and responsibilities will assist them to learn and know what they do not know).

In relation to this, Cross (1981:1) emphasize that adult learning programmes should capitalize on experience of participants, adapt to age-related limitations of the participants challenging them to move to increasingly advanced stages of personal development and offer maximum flexibility in +- terms of available and organization of learning programmes.;

Besides to this, West (1994:151) suggested the following features for effective staff development.

- Effective staff developments start from where the teacher is, though it is informed by a view of where he or she is going. It is there fore a 'building from' rather than a defect approach.
- Effective staff development involves teachers recognizing that they can and do learn 'on the job'- the classroom is an important development center for teachers as well as pupils.
- During the development process, feedback is available to stimulate and to reassure teachers who are experimenting the new behaviors.

- Individual learning in practical setting is related to key concepts and ideas which facilitate generalization.
- The best opportunities for staff development relate to these activities which teachers find meaningful and satisfying.

Moreover, Morley (1994:12) states that “where in house expertise is available and used well, school based INSET can be cost effective and less disruptive form of provision, as well as being tailored to specific needs. However, most schools recognize that there are dangers of looking only at the price- tag and being too school centered”.

The above points show that, school based INSET decreases the cost of the training as well as helps teachers to share their experience among staff members within the school and take responsibility for improving their practice. However, focusing only on the cost of the training has a problem of overlooking individual needs.

2.10 Creating Conditions for an Effective INSET Program

Different factors influence INSET programmes either positively or negatively. According to Bush (1971:56), the most important conditions for an effective program for in-service training are:

1. sufficient time to engage in the program;
2. conditions such that the program can be conducted with the necessary materials and supplies at hand;
3. a program that is relevant to the problem undertaken;
4. the necessary financial and other types support required to carry it out, and
5. an opportunity to use the results of the training in the regular school situation.

In the long run, an increase in capability will likely be a most powerful force to make for conditions that permit the program’s use. If a teacher does not know how to do better, he will surely not be able to push for the conditions that

will enable him to exercise this talent. If he is armed a battery of better alternatives for performing his educational function, he will more likely be persuasive in bringing about these conditions. Without such talent and knowledge, he is in a weak position to demand better conditions or better pay. Therefore, the development of higher degree of professional competence is the surest road to ward increased professional status and reward (ibid).

On the other hand, Rubin (1971:63) argues that “In-service training appears to be more effective when the total school staff is simultaneously engaged in a given training program. It is true, perhaps that when a total school system is engaged in a common endeavor, morale may be heightened”.

Organizing the INSET training for the whole staff has its own advantage and disadvantage. On the one hand, this type of training increases the motivation of the staff. On the other hand, attempting to provide the same training for the whole staff that would meet the needs of all teachers young or old, experienced or inexperienced is simply not adequate for the degree of specialization and sophistication that is not current in education circles.

Moreover Bradley et al (1994: 234) argue that there are different contextual factors that affect INSET activities. These are:

- the extent to which individual and institutional needs are each recognized as important. If in addition, teachers play an active part in establishing the priority which emerges from the two types of need, the chance of INSET leading to change is enhanced.
- the extent to which the staff as a whole feels it has control over the way in which the school moves forward. Schools confidently setting about their own development are characterized by a belief in individual development by sense of common purpose.
- sometimes change in schools fails to get off the ground because the proposal run counter to the staff’s beliefs, experience or practice. It is in these conditions that short INSET fails, because changing attitudes is a long- term process.

- it is the past experience of change- when they look an initiative was it supported and encouraged, were their effort welcomed, was it integrated into the schools practice? There is little doubt that one of the best indicators of likely success in bringing about change is the schools previous record of innovation.

Besides, he mentioned that choice of INSET methodology to suit the particular circumstance is another factor for optimizing INSET programmes. Flexibility, adaptability and choice are vitally important in the design and implementation INSET activities

Generally, the above points indicate that INSET activities will be effective if they are learner-centered, when the learner sees the task as appropriate, find the activities enjoyable, social and collaborative nature, follow-up support will be given priority when teachers participate in planning, organizing and evaluating INSET programmes.

Moreover, according to Bardley et.al (1994:9) account has to be taken of other pressures and initiatives and there needs to be a regular review of direction to adjust to externally- led changes and the externally imposed priorities. In contrast to the speed with which so many initiatives have been trust on schools, the involvement of colleagues who may in the past has been some what isolated in their practice and perhaps resistant to change, has required time to build up trust and non- threatening atmosphere for participation. Through increased opportunities for teachers to work along side colleagues in the classroom, sharing ideas at the professional level on non – contact (closure) days, and opportunities to visit other schools, as well as the more traditional course- based approach, wider acceptance of the need for some form of involvement and a feeling of ownership has been fostered.

The shift towards in- service education being seen as integral to not as in the past, outside, the concern of the school has been accompanied the view that INSET is done with not to teachers and school- staff- individual development should be seen as complementary strands.

Most schools have a designated INSET/professional development coordinator, but their individual energy and enthusiasm will not in itself sustain progress unless their strengths are coordinated and supported with in the culture of the school (Fullan: et al, 1990, Stenhous, 1975, quoted by Bardley et.al). While a lot of attention has been focused on needs identification and the administration systems and the capacity to meet needs open to question (Harland et al, 1993 cited in Bardley et.al 1994). Greater sophistication may be evident in the processes schools have used to identify needs, but the delegation of financial resources alone will not empower teachers to achieve a more satisfactory level of professional development (Morley, 1994:10).

Although there may be consensus with in a staff group about the schools INSET priorities, collaborative processes do not develop automatically and inherently generate conflicts and compromises. As with any whole school policy, there needs to be a shared understanding of what is achieved, by whom, the more likely to be achieved through active participation in the decision-making but another important dimension is the attitude, skills, and knowledge of INSET. What is the conceptual understanding of those charged with managing the program, what values and principles do they hold about effective staff development processes, what is the nature of their information or resource bank? What role do school governors play?

If professional development activities are valued by everyone involved, those charged with the responsibility for their planning and co-ordination need a personal belief in their worth, good interpersonal skills, trust and enthusiasm. Equally important are the skills and time to use resources creatively. This acquires a sound knowledge of internal and external resources, an understanding of adult learning, and a mind which is open to new possibilities. Given the emphasis on negotiation, client- centeredness, and value of money, it is disappointing that relatively little attention has been paid to the importance of understanding to the nature of learning opportunities that will best serve different needs.

Thus, INSET planners and organizers have to create conducive environment so as to achieve the intended outcome.

2.11 Characteristics and Principles of Effective INSET

The different principles of INSET reviewed by various literatures are mentioned by Rahel (2006:22) as follows:

1) The courses should be based on the result of participants' needs analysis.

Need analysis is one of the key aspects of course design. It is a great use if a training course bases its components on the results of need analysis of the target group. Waters (1998:19) stated that "teacher training courses have been designed to meet the participants' needs".

2) The course needs to incorporate awareness raising activities.

In an INSET program, which involves introduction of new approach or ideas, awareness-raising practice is a major component of the. Contra (1996) states that awareness-raising and articulating beliefs and principles to be first and most important steps in teacher training.

3) The courses should promote reflection in learning

Reflection is valuable for teacher education and development. As Wallace (1991:52) states, "the effectiveness of a course depends on how well it relates to the trainees own reflection and a fruitful change is extremely difficult without reflection". Reflection in INSET according to Moon (2002:178), aims at "improving of the quality the learning and the practical outcomes of the in a practical situation".

Hence, reflection is very important in in-service training of teachers because it relates theory with practice.

4) The courses should be based on the concept teacher development.

Teacher development is a process of life long learning in the teaching profession (Hiep, 2001:31).According to Rahel (2006), teacher development is connected with growth. Hiep (2000:33) cited in Rahel (2006) any training course either pre-service or in-service, long term or short term can be criticized for short comings. This is because as he explains “training courses ... can not satisfy all trainees’ needs, nor can they solve most of the problems occurring at the trainees home institutions”. Spratt (1994) strengthens this by saying, “The course itself is not the end of a career; after the course there is still life and trainees must face reality at home”.

5) The course should be participant centered.

In-service courses need to be conducted by using techniques that provide maximum opportunities for participants in order to tap the experience of the participants (Keith and Janet, 1991 in Rahel, 2006). In practice, this means, according to Hayes (1995:258) “session should give participants an opportunity to talk about their perceptions on the teaching learning process”. In relation to this UNESCO(1998:44) remarks that one of the characteristics of successful INSET programmes uses participatory, learning by doing and multiple interaction methods.

6) The course should theory and practice.

Theory and practice integration is vital for the success any training programmes (Widdowson, 1984 in Rahel ,2006).This because, according to (Hayes ,1995 and Ramini ,1987), the integration of theory and practice, within the process of learning is rewarding learning experience.

Hence, the integration of theory and practice is a very important issue of any type of training because theory without practice will not be assimilated by trainees.

7) The course should be task based.

Task based methodology helps teachers consider the rationale behind the use of practical classroom activities, which enable them to continue to develop as teachers (Hayes, 1995 in Rahel, 2006). Regarding the use of task based methodology Cameron (1997:345) states that “in addition to the use of classroom tasks as resources for training, the training itself can be task based, making use of similar stages and components as classroom tasks, and modeling task based methodology and thinking for trainees”. This task based methodology therefore encourages participants to uncover the underlying methodological aspects of the use of task.

8) Evaluation follow-up should be an integral part of the course.

According to Rahel (2006:29) evaluation is a very important activity. Through evaluation as Dadely-Evance and St. John (1998:129) state that ‘there is a chance to focus on what has been going well and to ask what have been the most significant contributing factors so that less successful aspects can be modified “. According to Keith and Janet (1991:124), follow-up activities should be an integral part of training strategies for the linkage between in-service courses and actual classroom practice. Thus, evaluation and follow-up is necessary in any training because it helps to check whether or not the intended outcome is achieved or not.

In relation to the above points, Wood and Thompson (1981:88-90) stated the following critical characteristics of professional development programmes.

- ❖ In-service education should be conducted in a supportive climate of trust, peer support, open communication, and staff commitment to a set of clearly understood norms for functioning in an institution (clear roles, program definition, instruction procedures, and goals).
- ❖ In-service education goals should be based upon a common set of expectations held by the participants for normative behaviors that are essential to performing their professional roles in their institution.

- ❖ Successful in-service education requires support from administration and school boards including time, personnel, training materials, and funds to enable the training necessary to implement educational programmes in their school district.
- ❖ Decisions concerning the objectives, experiences, and assessment of in-service education should be cooperatively developed by those involved in and affected by the training program.
- ❖ In-service education should be based upon assessed needs of participants. A need is defined as a gap between the expected professional performance and actual performance in the work setting.
- ❖ In-service education should model the instructional behaviors desired of participants.
- ❖ In-service education programmes should be demanding and set high but reasonable standards of performance for participants.
- ❖ In-service education programmes should have three major components: 1) Attitude, 2) pedagogical skills, and 3) substantive knowledge.
- ❖ In-service education should prepare educators to implement research findings and best practice related to carrying out their job responsibilities.
- ❖ In-service education should be decentralized; focus on actual school problems, goals, needs, and plans; and be conducted, whenever feasible, in the school setting.
- ❖ In-service education should emphasize use of rewards (such as opportunity, increased autonomy, participation in decision making, increased competence, success, and advancement) which have been shown to promote high commitment and performance.
- ❖ In-service education should be based upon clear, well understood, specific goals and objectives that are congruent with institutional and personal goals.

- ❖ In-service education should provide options for participants that will accommodate individual professional needs and learning styles (timing, sequence, pace, interests, goals, delivery systems).
- ❖ In-service education should be experientially based with opportunities to select, adapt, and try out new professional behaviors in real and simulated work settings.
- ❖ Central office personnel and school administrators should support in-service education through their participation in training activities with their peers and subordinates.
- ❖ In-service education programmes should provide for follow-up and “on call” assistance to educators as they use their new skills and understandings in the work setting after they have been trained.
- ❖ Leadership in in-service education programmes should be situational and emphasize authority by competence and expertise rather than by position.
- ❖ Evaluation of in-service education should be both formative and summative and should examine the immediate effect on participants, extent of transfer to the work setting and the effect on achieving institutional goals.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Methodology

A descriptive survey method was used in this study to reveal the contribution of in-service training for the professional development of secondary school teachers in Addis Ababa city administration currently. The method is selected for it gives a chance to describe the existing condition or position of the program.

3.2 Sources of Data

In this study, the following sources of data are used. The first sources were secondary school teachers. The second sources were school directors, and the third sources were sub-city education and training experts and documents at various levels.

3.3 Sample Population and Sampling Techniques

Addis Ababa is one of the chartered cities in the Federal Democratic Republic of Ethiopia. There are ten sub-cities in the region. According to Education Statistics Annual Abstract by Addis Ababa Education Bureau (AAEB) (2004/05:141-143) there are twenty one government general secondary schools in the city.

To make the sample area manageable and representative seven sub cities were selected using random sampling and out of 21 general secondary schools 7 (33.33%) were selected from the sub-cities. Using quota sampling out of these schools, 180 teachers were selected by using quote and purposive sampling techniques because the quota and stratified sampling were helpful to balance gender and experience ratios among sample population. Besides, seven school

principals from different schools and three sub-city education and training experts selected using purposive sampling technique.

Table I Sample Schools used as Source of Data

S. No.	Schools	Sub-city	No of Sample Teachers
1	Ayer Tena	Kolfe/Keranyo	27
2	Bole	Bole	22
3	Dilachin	Addis Ketema	23
4	Dil Ber	Gulelie	25
5	Kefteгна-23	Nefas-Silk/Lafto	26
6	Kokebe Tsibah	Yeka	30
7	Shimelis Habte	Kirkos	27
	Total		180

3.4 Instruments and Procedures of Data Collection

Based on the basic research questions and in light of the review of the related literature, questionnaire was designed for secondary school teachers. The questionnaire was made to include both close-ended and open-ended questions. The draft questionnaire was evaluated by colleagues and the thesis advisor. Based on the comments the researcher improved some of the items. Then, it was pilot tested on ten teachers in Lem secondary school before it was distributed to the target study groups. It was done to ensure the appropriateness of the items. On the basis of the feedback, some ambiguous questions were modified. Then, the questionnaire was duplicated and distributed to 180 respondents. Completed questionnaires were collected. The return rate was 173 (99.11%), which met a greater satisfactory level of returns (Refer Appendix A).

Furthermore, interview was conducted with school principals in the selected sample general secondary schools and with sub-city education and training experts. (Refer Annex B)

3.5 Method of Data Analysis

Data gathered through questionnaire were tallied, tabulated and quantified. That means, percentage was employed to analyze various characteristics of the sample population. It was also calculated to determine the proportion of the total respondents who have similar judgment. Moreover, percentage was used to compare the results.

The data collected through interview from school principals and sub-city education and training experts were analyzed qualitatively. The data was used to elaborate the ideas and sometimes to show the difference as a means to triangulate.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

This part of the thesis deals with the presentation and analysis of the data collected from the sample respondents to seek appropriate answers for the basic questions raised at the beginning of this research. To this effect, a total of 180 questionnaires were distributed to secondary school teachers. Out of these, 173 of the teachers filled in the questionnaire and returned. The rate of return of questionnaire was 99.11%, which is regarded very high for a survey study of this kind. Moreover, interview was done with seven school directors and three sub-city education and training experts. The data collected from questionnaire were then arranged in tables. Based on the responses obtained, analysis and interpretation of the data are presented following each table.

4.1 Part One: Personal Data

Table II: Description of Respondents by Sex and Age

Serial No	Item	Respondents	
		Teachers	
		No	%
1	Sex		
	Male	133	76.88
	Female	40	23.12
	Total	173	100
2	Age(in years)		
	20-25	43	24.86
	26-30	40	23.12
	31-35	25	14.45
	36-40	20	11.56
	≥ 41	45	26.01
	Total	173	100

Table II deals with the two characteristics of the population under study; that is sex and age. As shown in item 1, the majority of the respondents constitute males (76.88%), while females make up a small minority (23.12%) of the total sample.

This finding shows the imbalance that exists between males and females in the teaching profession at the secondary school level. However, the ideas represent from the two groups. With respect to the age category, 43 (24.86%) of the respondents fall within the age range of 20-25, while 40(23.12%) fall within the age range of 26-30 where as 25(14.45%) of the respondents fall within the age range of 31-35. Again 20(11.56%) of respondents fall with in the range of 36-40. The remaining 45(26.01%) of the respondents fall with in the age range of 41 years and above.

Therefore, the above data shows that the majority 130(75.14%) of the respondents were 26 years and above. This shows that most of the respondents were matured enough in age to give genuine and reliable information on their teaching experiences.

Table III. Description of Respondents by Years of Service

Item	Respondents			
	In teaching		As a director	
Years of service	No	%	No	%
≤ 5	47	27.17	5	2.89
6-10	46	26.59	2	1.16
11-15	29	16.76	–	–
16-20	7	4.05	–	–
21-25	20	11.56	–	–
≥ 26	24	13.87	–	–
No Response	–	–	166	95.95
Total	173	100	173	100

As can be seen from the table, 47(27.17%) had served for 5 years and less in teaching. Moreover, 5 (2.89 %) of the teachers had served as directors for 5 or less years. While 46(26.59 %) and 2 (1.16 %) teachers had served in teaching and as directors between 6-10 years respectively. On the other hand, 29 (16.76%) had served between 11-15 years in teaching. Where as 7(4.05%) had served between 16-20 years and 20(11.56%) had served between 21-25 years. While the remaining 24 (13.87%) had served for 26 years and above. From this one can see that the majority of the teachers 93(53.75%) have ten or less years of experience.

The gap in the years of service provides opportunities for school based exchanged of experiences, and the need for in-service training to equip them with the skills of teaching.

Table IV. Description of Respondents by Qualification

Serial No.	Item	Respondents	
		Teachers	
		No	%
	12+2	4	2.31
	12+3	7	4.05
	BA/BSC/BED	153	88.44
	MA/MSC/MED	8	4.62
	No Response	1	0.58
	Total	173	100

As can be seen, the majority of the teachers, 153(88.44%) are first degree holders. While 8(4.62%) of the teachers were second degree holders.

Therefore, this proves that majority of the teachers teaching in the secondary schools of Addis Ababa have a qualification of first degree and above. The need for in-service training and its arrangement may not be difficult for most of them are in the same level of education. The responses seem to be valid and for such a group could be critical on such matters.

Table V: Description of Subject of Specialization

Serial No	Subject	Subject are of specialization			
		Major		Minor	
		No	%	No	%
1	Amharic	14	8.09	23	13.29
	English	28	16.18	10	5.78
	Mathematics	28	16.18	25	14.45
	Physics	12	6.95	29	16.76
	Chemistry	22	17.72	21	12.14
	Biology	19	10.98	5	2.89
	Geography	15	8.67	15	8.67
	History	17	9.83	10	5.78
	Pedagogy	5	2.89	-	-
	Civics	-	-	1	0.58
	Psychology	1	0.58	2	1.16
	Health and physical education	4	2.31	-	-
	Demography	-	-	1	0.58
	Political science	1	0.58	-	-
	Public administration	-	-	1	0.58
	Economics	-	-	1	0.58
	Sociology	1	0.58	-	-
	Afan Oroma	-	-	1	0.58
Undetermined	6	3.47	28	16.18	
	Total	173	100	173	100

As can be seen from the table, most of the respondents specialized in English 28(16.18%) and mathematics 28 (16.18%) as their major areas and 29 (16.76%) in physics and 25 (14.45 %) mathematics as their major areas.

Therefore, the above data shows that majority of the teachers in the secondary schools have major and minor studies. The responses seem to reflect their needs and what should be there.

4.2 Part Two: Presentation and analysis of Data

Table VI: Description of accessibility and type of In-service Training Programmes

Serial No	Item	Respondents	
		Teachers	
		No	%
1	Is there an access to an in-service training program opportunity in your school?		
	a) Yes	149	86.13
	b) No	24	13.87
	Total	173	100
2	Are the in-service trainings equally accessible to all teachers?		
	a) Yes	91	52.60
	b) No	76	43.93
	c) No Response	6	3.47
	Total	173	100
3	If your answer to question number 1 is "yes", what types of in-service training programmes are mostly arranged in your school?		
	a) short term training (eg. workshop)	95	63.76
	b) visiting other schools	10	6.71
	c) summer course program	41	27.52
	d) distance education	3	2.01
	Total	149	100

As can be seen from the table, 149(86.13%) of the respondents reported that there is accessibility of in-service training. While the remaining 24 (13.87%) said no to the question accessibility of in-service training.

The above data shows that there is an access to an in-service training in Addis Ababa city administration. On the other hand, regarding item 2, i.e. the fair accessibility of in-service trainings, 91 (54.49%) of the respondents agreed and 76 (45.51%) of the respondents disagreed. This shows that there is fair accessibility of in-service training to all teachers in the city administration.

Regarding item 3 of the same table, 95 (63.76%) indicate that short-term trainings (workshops) are mostly arranged in their schools. Only 10 (6.71%) affirmed that visiting other schools are the most widely arranged in-service training programmes. While 41(27.52%) of the respondents indicated that summer course programmes are the most widely used in-service training programmes. The rest 3 (2.01%) affirmed that distance education is mostly arranged in-service training program.

Therefore, the above data shows that most teachers in schools had the opportunity in participating in short term trainings (workshops).

Similarly, the interview conducted with school principals indicated that short-term trainings (workshops) and the summer in-service training programmes are the most widely arranged teacher INSET programmes.

However, the problems of the INSET programmes, as most respondents described include inconvenient time schedule, teachers' personal problems, shortage of resources, mainly finance, shortage of skilled manpower, lack of interest of teachers involved in INSET, shortage of resources in the country, etc.

Normally, an improvement in the teaching learning process can be achieved if teachers at diploma level in the school improve their qualification through in-service training. Hence, fair access of an INSET programmes to all teachers in a school seems necessary.

Table VII: Teachers' Access to Information about there Professional Development

Serial No	Item	Respondents	
		Teachers	
1	Do teachers have access to new information About their professional development?		
	a) Yes	95	54.91
	b) No	71	41.04
	c) No response.	7	4.05
	Total	173	100

According to the information from the table, 95 (54.91%) of the teachers had access to new information. while 71 (41.04%) of the teachers responded that they didn't have access to new information regarding teachers' professional development.

Moreover, the teachers who responded, "There are different access to new information" indicated that they had the opportunity of getting new information

through internet, print media like news paper, magazines, journals, from different workshops (INSET programmes), by sharing experience with other teachers, TV, etc.

Therefore, the above data shows that most teachers have the opportunity to get new information and update themselves every time through different means, which actually help teachers up date their teaching materials and presentation skills using technologies.

Table VIII: Planning an INSET Programmes for Teachers'

Serial No		Respondents	
		Teachers	
		No	%
1	Who mostly plans the in-service training program for teachers?		
	a) teachers themselves	–	–
	b) principals	5	2.89
	c) kebele education experts	7	4.05
	d) experts at sub-city level	18	10.41
	e) experts at regional level	55	31.79
	f) experts at federal level	86	49.71
	g) No Response	2	1.16
	Total	173	100
2	At what level is mostly the in-service training program for teachers planned?		
	a) at School level	5	2.89
	b) at Kebele level	7	4.05
	c) at Sub-city level	17	9.83
	d) at Regional level	55	31.79
	e) at Federal level	86	49.71
	h) No response	3	1.73
		Total	173

From the above table, one can see that more than half, 86 (49.71%) of the respondents indicated that in-service training for teachers is planned by

experts at federal level, while 55 (31.79%) of the respondents confirmed that in-service training for teachers planned at regional level.

This shows that most in-service training programmes for teachers are planned by experts at federal and regional levels.

Table IX: Teachers' Participation in in-service Training

Serial No	Item	Respondents	
		Teachers	
		No	%
1	In the past two years have you participated in any form of in-service training?		
	a) Yes	109	63.00
	b) No	56	32.37
	c) No response	8	4.62
	Total	173	100
2.1	If your response is 'yes', to item 1 please indicate the rate of your participation in Short term training (e.g. workshop)		
	a) once	42	38.53
	b) twice	25	22.94
	c) three times	15	13.76
	d) four and more than four times	13	11.93
	e) No response	15	13.76
	Total	109	100
2.2	Visiting other schools		
	a) once	6	5.50
	b) Twice	3	2.75
	c) three times	0	0
	d) Four and more than four times	0	0
	e) No response	100	91.74
	Total	109	100
2.3	Summer course program	31	28.44
	Total	109	100
2.4	Distance education	4	3.67
	Total	109	100
2.5	Organizer of the training		
	a) School	2	1.16
	b) Kebele education office	7	4.05
	c) Sub-city Education office	33	19.08
	d) Regional Education Bureau	96	55.49
	e) MOE	32	18.50
	f) other	8	4.62
	g) No response	5	2.89
	Total	173	100

From the above table of item 1, 109 (63 %) of the teachers had participated in in-service training in the past two years. While 56(32.37 %) of

the respondents didn't get the chance in participating in INSET programmes in the past two years.

Regarding item 2.1, 42(44.68%) of the respondents had participated once in short term trainings (workshops). Again 25 (26.6%) had participated twice. Only 15(15.96%) had participated three times. The rest 13(13.83%) had participated in workshops.

Therefore, from the above data we can observe that most teachers participated in workshops for two or less times. Regarding item number 2.2, 6(5.5%) of the respondents indicated that they have participated once in visiting other schools. While 3(2.75%) participated twice in visiting other schools.

Therefore, from the above data we can understand that most teachers did not get the chance of visiting other schools. Visiting other schools is a very important type of INSET because it may give the chance of sharing ideas among teachers of different schools.

Regarding the summer course program (i.e. item 2.3), 31(28.44%) of the respondents participated once in summer course program.

On the other hand, item 2.4 of the same table, showed that 4(3.67%) of the respondents had participated in distance education program once.

From the above data, one can understand that most teachers in the city administration had got the chance of participating in in-service training programmes. Short- term trainings and summer course programmes are the most common in-service activities. Moreover, the interview conducted with school directors showed that the most common in-service training programmes that are arranged in their schools are short term trainings such as ELIP (English Language Improvement Program), workshops on active learning, continuous assessment, teachers development program (TDP), civics and ethical education, etc.

Table X: Contribution of In-Service Training for Teachers' Professional Development

Serial No	Item	Respondents	
		Teachers	
		No	%
1	Do you believe that the in-service training given to you has a contribution to your professional development?		
	a) Yes	140	80.92
	b) No	11	6.36
	c) No response	22	12.72
	Total	173	100

According to the table, 140 (80.92%) of the teachers affirmed that the INSET they had participated have contribution to their professional development. While 11 (6.36%) of the respondents indicated that the INSET they had participated do not have contribution to their professional development.

Therefore, the above data indicates that the in-service training given had a contribution to the professional development of teachers.

Moreover, the teachers who respond 'yes' to the above question in the above table indicated through open ended item that some of the developments followed after their training. The in-service training helped them in upgrading their qualification, increment of their salaries, enhancing their teaching, helping in the overall classroom management of their teaching, etc.

In addition to this, the interview conducted with sub-city education and training experts and school directors showed that INSET programmes minimize shortage of trained teachers and contributed a lot in minimizing shortage of qualified teachers. Besides, an INSET program helps teachers to master the

subject matter they teach, it helped them in lesson planning, classroom and time management, how to employ active learning in the class room, continuous assessment, enhance their interest to teach, etc.

On the other hand, the teachers who responded 'No' to the above question in the above table indicated that some of their reasons to their response are that no access to the application of INSET in the classroom, teachers are not willing to implement INSET training, the contents of the trainings are irrelevant to teachers professional development, difficulty of applying it in the classroom, poor planning of the INSET programmes, because of inefficiency of trainers, etc.

Table XI: In-service Training Programmes for Upgrading Teachers

Serial No	Item	Respondents	
		Teachers	
		No	%
1	Are there in-service training programmes to upgrade the qualification of teachers?		
	a) Yes	112	64.74
	b) No	48	27.75
	c) No response	13	7.51
	Total	173	100
2	What kinds of in-service training do teachers use mostly to up grade their qualification in the city administration?		
	a) summer course program	102	60.00
	b) evening (extension) program	49	28.32
	c) distance education program	6	3.47
	d) systematically arranged class along with teaching	3	1.73
	e) No response	13	7.51
	Total	173	100
3	Are there clear in-service training strategies and guidelines?		
	a) Yes	67	38.73
	b) No	92	53.18
	c) No response	14	8.09
	Total	173	100
4	Are training programmes in line with school development and the interest of the teachers?		
	a) Yes	98	56.65
	b) No	64	36.99
	c) No response	11	6.36
	Total	173	100

The first two questions of table XI deals with the availability and kinds of INSET programmes for the upgrading teachers' qualification. While the last two items of the same table deal with the availability of clear INSET strategy and guideline; and whether INSET programmes match with the interest of teachers and school development plans.

Regarding item 1 of table XI, 112(64.74%) of the teachers agreed with and 48(27.75%) of the teachers disagreed with the availability of INSET programmes to up grade teachers' qualification.

Therefore, the above data indicates that there are INSET programmes to upgrade teacher qualification in the city administration.

Item 2 of the same table shows that 102 (60%) of the respondents agreed with summer course program, while 49(28.32%) agreed with evening (extension) program, 6 (3.75%) agreed with distance program and the rest 3(1.73%) agreed with the systematically arranged class along with teaching are the most available INSET programmes for upgrading teachers' qualification.

Thus, majority, 102(60%) the respondents showed that the summer course program is mostly used to upgrade the qualification of teachers in the region.

Regarding item 3 of the above table, 67(38.73%) respondents agreed with the presence of clear INSET strategies and guideline, while 92(53.18%) disagreed with the presence of clear INSET strategy and guideline. On the other hand, the interview conducted showed the presence of INSET strategy and guide line which is prepared by MOE and AAEB.

Therefore, the above data indicate that (53.18%) of the respondents showed the INSET programmes were planned and organized without clear strategy and guideline. However, this may be lack of information about the guidelines.

Regarding item 4 of the same table, 98(56.65%) of the respondents affirmed that INSET programmes are in line with teachers' interest and school development plans. While 64 (36.99%) of the respondents responded that

INSET programmes did not go in line with the interest of teachers and school development plans.

Therefore, majority (60.49%) of the teachers indicated that the INSET programmes in the city administration were not in line with their interests and school development plans.

Table XII: Description of the Availability of Resources

Serial No	Item	Respondents	
		Teachers	
		No	%
1	Are there adequate training facilities and materials?		
	a) Yes	70	40.46
	b) No	93	53.76
	c) No response	10	5.78
	Total	173	100
2	Are there adequate budget for INSET training?		
	a) Yes	33	19.08
	b) No	137	79.19
	c) No response	3	1.73
	Total	173	100
3	Are there competent and trained in-service training personnels?		
	a) Yes	61	35.26
	b) No	106	61.27
	c) No response	6	3.47
	Total	173	100
4	Is there sufficient and convenient time schedule for in-service training programmes?		
	a) Yes		
	b) No	38	21.97
	c) No response	125	72.25
		10	5.78
	Total	173	100

As shown in item 1, 70(40.76%) agreed with the presence of adequate training facilities and materials. While 93(53.76%) of the respondents disagreed with the presence of training facilities and materials.

Therefore, the above data may indicate that training facilities were not adequate in the city administration. Regarding item 2 of the same table, 137 (79.19%) disagreed with the presence of adequate budget for in-service training programmes. While 33 (19.08%) of the respondents agreed with the presence of adequate budget for INSET programmes.

Therefore, the above data may indicate that adequate budget was not allocated. Sufficient budget is necessary for INSET programmes because finance is a major factor in INSET programmes.

With regard to item 3 of the same table, 61(35.26%) of the respondents agreed and 106(61.27%) of the respondents disagreed with the presence of competent and trained personnel for INSET training.

This shows that there is shortage of trained INSET personnel in the city administration. Competent and trained trainers are important for the INSET programmes to achieve their objectives.

Regarding item 4 of the above table, 38(21.97%) of the respondents agreed while 125 (72.25%) of the respondents disagreed with the presence of sufficient time and convenient schedule.

Therefore, the finding shows that the time given for INSET programmes was not sufficient and the schedule was not convenient for the trainees.

Table XIII: Description of Evaluation of INSET Programmes

Serial No	Item	Respondents	
		Teachers	
		No	%
1	Are evaluations made to check whether the in-service training programmes are achieving the intended results?	55	31.79
	a) Yes	94	54.34
	b) No	24	13.87
	c) No response		
	Total	173	100
2	Are the feedback got from evaluation used for further planning of in-service trainings?		
	a) Yes	3	1.73
	b) No	52	30.06
	c) No response	118	68.21
	Total	173	100

In item 1, 55(31.79%) of the respondent agreed and 94(54.34%) of the respondents disagreed whether evaluations are made to check the achievement of the intended objectives of INSET programmes.

Therefore, the finding indicates that INSET programmes are not evaluated most of the time. However, the interview conducted with sub-city education and training experts showed that evaluation of INSET programmes were rarely done.

Normally, evaluation of INSET programmes is very important because it helps to see strong and weaknesses and enables the concerned body to improve the weaknesses.

Regarding item 2 of the above table, 3(1.73%) of the respondents agreed while 52 (30.06%) of the respondents disagreed with whether the feedback got from evaluations are used for improvements of INSET programmes. Moreover, 118(68.21%) of teachers didn't respond to item number 2.

Therefore, the above finding proves that after evaluation, the feedback was not used to improve INSET program.

Table XIV: Description of Barriers of INSET programmes

Serial No	Item	Respondents	
		Teachers	
		No	%
1	Are there barriers that hinder the effectiveness of in-service training programmes for teachers?		
	a) Yes	142	82.08
	b) No	21	12.14
	c) No response	10	5.78
	Total	173	100
2	If your answer to number 1 is 'yes', which barriers mostly affect INSET programmes for teachers?	42	29.58
	a) financial problem	17	11.97
	b) expertise problem	15	10.56
	c) material problem	30	21.13
	d) time problem	19	13.38
	e)lack of interest of teachers	17	11.97
	f) lack of relevance of the content of INSET	1	0.70
	g) any other	1	0.70
	h) No response		
		Total	142

As shown in the table, item 1, 142(82.08%) of the respondents agreed with the presence of barriers that hinder INSET programmes for teachers. While 21(12.14%) of the respondents disagreed to the presence of barriers that hinder INSET programmes. Therefore, the above data prove the presence of factors which hinder INSET programmes.

Regarding item 2 of the same table, 42(29.59%) of the respondents indicated that financial problem is the most affecting factor that hinders INSET programmes for teachers. While 30(21.13%) of the respondents indicated that time is the most affecting barrier that hinders INSET programmes for teachers.

Moreover, in relation to this the interview conducted with sub-city education and training experts revealed that finance, time and shortage professional trainers are the main barriers that hinder the INSET programmes for teachers in the city administration.

Therefore, from the above finding one can understand that finance and time problems are the two major barriers that hinder INSET programmes for teachers.

Table XV: Description on Induction Program for Teachers

Serial No	Item	Respondents	
		Teachers	
		No	%
1	Is there an induction program for beginning teachers in your school?		
	a) Yes	83	47.98
	b) No	72	41.62
	c) No response	18	10.41
	Total	173	100
2	Do you think that the induction program for beginning teachers play a great role for their future professional development?		
	a) Yes	80	96.39
	b) No	3	3.61
	Total	83	100

As shown in the table, item 1, 83 (47.98%) of the respondents agreed with the presence of induction program. While 72 (41.62%) of the respondents disagreed with the presence of an induction program in their schools.

Therefore, from this finding an induction program is in action in most general secondary schools of the city administration.

Regarding item 2 of the same table, 80(96.39%) of the respondents agreed that the induction programmes for beginners has a great role in their professional development. While the rest 3(3.61%) disagreed to the contribution of induction program for beginning teachers for their professional development.

Moreover, the interview conducted with school directors and sub-city training experts revealed that induction programmes play a significant role in helping to develop confidence; introducing school culture (adapting school environment), sharing of experience between senior and new teachers, gives an opportunity to introduce innovation to schools, etc for beginning teachers.

Therefore, from the above finding we can conclude that an induction program for beginning teachers has a great contribution for the professional development of beginners.

CHAPTER FIVE

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this part of the thesis, summary of the major findings of the study, conclusions drawn on the basis of the findings and recommendations that are assumed to be useful to enhance the contribution of INSET programmes for the professional development of teachers are presented.

5.1 Summary

The purpose of the study was to assess the contribution of INSET programmes for the professional development of secondary school teachers in Addis Ababa region. To meet this purpose, the study was conducted in seven general secondary schools one in each sub-city. Moreover, education and training experts in three sub-cities were interviewed on issues that need clarification. The necessary information was gathered mainly through questionnaire. The data obtained were analyzed using percentage. Based up on the analysis made, the major findings of the study are summarized as follows:

- 1) Majority of the teachers confirmed that there is access to an INSET opportunity in their schools. Moreover, a little more than one-half of the teachers agreed with the fair accessibility of an INSET program.
- 2) Substantial portion of the teachers indicated that short-term trainings such as workshops and summer course programmes are mostly arranged INSET programmes in their schools.
- 3) A little more than one-half of the teachers had access to new information. The main accesses to new information for them are internet, print media, books, etc.
- 4) Nearly one-half of the teachers indicated that experts at the Federal level were the planners for their in-service training program for teachers.
- 5) Nearly two third of the teachers got the chance to participate in in-service training programmes in the past two years. While one-third of the

teachers did not get an opportunity to participate in any form of in-service training programmes in the past two years.

6. Majority of the teachers participated once or twice in short- term trainings (workshops).
7. More than one- half of the teachers indicated that regional Education Bureau as the organizer of in-service trainings. The sub-city Education department and MOE organize INSET programmes rarely.
8. Majority of the teachers agreed with that the training programmes given to them had contribution to their professional development. Teachers showed improvements in lesson planning, continuous assessment, employing active learning methodology in the classroom, preparation and usage of teaching aids, creating smooth relationships with students, staff and parents, classroom management, etc. Moreover, they described their developments in terms of upgrading of their qualification, salary improvement and helped in the overall classroom management of their teaching which of course, increased their professional competence and skills, etc.
9. Majority of the teachers had already got the opportunity to upgrade their qualification through in-service training programmes. Majority Substantial portion of the teachers used mostly the summer course programme to upgrade their qualification.
10. Though they are infavour of in-service programmes, more than one-half of the teachers said they don't know on the presence of clear in-service training strategies and guidelines.
11. Majority of the teachers indicated that the in-service training programmes were in line with their interest and school development plan.
12. More than one- half of teachers agreed with the absence of adequate training facilities and materials in schools and colleges. However, majority of the teachers replied that there have been lacks of adequate budget for INSET. Majority of the respondents also expressed their view on the presence of competent and trained INSET personnels. Besides,

- nearly three- fourth of the teachers replied that there was no sufficient and convenient time schedule for INSET programmes.
13. A little less than two- third of the teachers responded that there was no preset evaluation of INSET program to check whether the intended objectives were met. Moreover, some of the teachers indicated that the feedback got from evaluation of INSET were not used for further planning of INSET program.
 14. Majority of the respondents agreed with the presence of barriers that hinder INSET program for teachers. A little more than one- fourth of the respondents indicated that financial problem as the major barrier that hinders INSET program. While nearly one- fifth of the teachers indicated that time arrangement problem as the most affecting barrier of the INSET Program.
 15. A little less than one-half of the teachers indicated that induction programmes were practical in their schools. However, some of the respondents disagree on the presence of an induction program for beginning teachers in their schools. Besides, majority of the teachers indicated that the induction programmes were helpful for their professional development.

5.2 Conclusions

Based on the basic research questions and in line with the preceding research findings and considering the review of related literature, the following conclusions are drawn:

The research finding indicates that INSET programmes are accessible to teachers in Addis Ababa city administration. Besides, most teachers participated mostly in short-term trainings (workshops) not more than twice. But other INSET programmes such as distance programme is given less attention.

Most teachers had different access to new information. The sources of information for them were books, internet, news papers, magazines, TV, radio, etc.

INSET programmes in the city administration were planned and organized by sub-city, regional education bureau and the Federal MOE experts. Schools and teachers are given less attention.

The INSET programmes given for secondary school teachers in the city administration had contribution to their professional developments like improvement in salary, upgrading qualification, and increase in their professional knowledge and skills, etc. Moreover, teachers in the city administration upgrade their qualification mostly through summer course program. According to Addis Ababa Education Bureau (1997 E.C) 13th Annual report, 836 teachers upgraded their qualification from diploma to degree level through summer course program. This shows that if teachers upgrade their qualification then they will improve their teaching competence and skills.

The research finding shows that INSET strategies and guidelines were not clearly stated. However, most of the INSET programmes that were given for secondary school teachers in the city administration were not in line with their interests. Adequate budget were not allocated for INSET programmes of teachers in the city administration. Besides, there is no sufficient time and convenient time schedule to INSET program for teachers in the city administration.

Even though the research finding indicated the presence of different barriers that hinders the effectiveness of INSET programmes in the city, administration, evaluation of INSET programmes were rarely done and the feedback got were not used for correcting the defects of the INSET program given.

Induction programmes were practical in the general secondary schools of the city administration. This shows that the induction program was used for socializing beginning teachers to school environment and culture.

5.3 Recommendations

Based on the major findings and conclusions drawn with respect to the contribution of INSET programmes for the professional development of teachers, the following recommendations are suggested.

- 1) The research findings show that major INSET programmes that were arranged for teachers of the region are short-term trainings (workshops) and summer course programmes. In addition to these, distance education program should also be organized so that those teachers who are constrained by different problems such as family commitment could benefit.
- 2) INSET programmes will be successful if trainees (teachers) participate in planning, organization and evaluation of INSET programmes. Their participation will make them be motivated and strive for the success of the program. Moreover, it creates a feeling of ownership of the program. Hence, teachers of the region should play their part in planning, organizing and evaluating INSET programmes.
- 3) Some INSET programmes for teachers are followed by incentives and improvement in qualification (upgrading) but others do not. If teachers are rewarded (improved their salaries) after INSET programmes. Then their motivation and interest towards their job and profession will be enhanced. Therefore, INSET programmes for teachers should be followed by rewards or incentives.
- 4) In order to maximize the effectiveness of an INSET program for teachers, the programmes should be in line with the interests of teachers. Adequate budget should be allocated; sufficient time and convenient schedule should be set to the INSET programmes. Because finance and time are the most determining factors of an INSET program.
- 5) The effectiveness of an INSET program for teachers also depends on the knowledge and skills of training experts (personnel). Hence, well trained and competent INSET personnel should be assigned. The assignment should be

based on competence and expertise rather than by mere years of service and administrative position.

- 6) The evaluation process of INSET program for teachers provides information about whether the intended objectives are achieved or not. It helps to take corrections for any defect in the training program, shows strengths and weaknesses of the program, etc. Hence, due attention should be given for the evaluation of an INSET program.
- 7) To minimize the attrition rate of beginning teachers in the city administration the induction program should be used twice a year because many beginning teachers lose their job in early years of their experience.

References

- Adams E. (1975). **In-service Education and Teachers Centers**, England, Robert Maxwell, M.C.
- Addis Ababa City Administration Education Bureau (2004/5). **Education Statistics Annual Abstract**. Addis Ababa: Berhanena Selam printing Interprise.
- Bardley, H (1995) **Developing Teachers Developing schools**, London: David Fulton publishers.
- Begelow K.et. al (1946). **The improvement of Teacher Education a final report by the Commission on Teacher Education**, American Council on Education, USA, Universal Lithographers, Inc. Balimore 2, MD.
- Bishop L. (1976). **Staff Development and Instructional Improvement Plan and Procedures**, USA, Allyn and Bacon, Inc.
- Chaurasia (1967). **New Era in Teacher Education**. India, Sterling Publishers (pvt) Ltd.
- Conco Z. (2004). "How Effective In-Service Training for Teachers in the Rular School Context?" South Africa, University of Pretoria (unpublished)
- Goble N. and Porter J. (1977). **Changing Role of the Teacher**, Paris, UNESCO, NFER Publishing co.Ltd.
- Greenland J. (1983). **In-service training of Primary Teachers in Africa**, London, Macmillan Publisher.
- Haile Getaneh (2001). "Utilization and Professional Development of Secondary School Teachers in Oromia Regional state", AAU (unpublished)
- Hailesilasie Fiseha (2004) "The Status of Continuous Professional Development Program for Secondary School Teachers in Addis Ababa", AAU, (Unpublished).
- Harrison R. and Gowin L. (1958). **The Elementary Teacher in Action**, San Francisco, wads Worth Publishing Company, INC.
- Husen and Postle Wiaite, T.N (1994). **International Encyclopedia of Education**. BPC. Whetons Ltd, Exeter, Great Britain.

- Kaplan L. and Edelfelt R. (1996). **Teachers for the New Millennium; Aligning Teachers Development: National Goals, and High Standards for All Students.** CORWIN PRESS, INC. California.
- Liebrman A and Miller L. (1978). **Staff Development: New Demand, New Realities, New Perspectives, USA,** Teacher College Columbia University Press.
- Luel Tadess (2006) “In-Service Secondary Teacher Education Trainees’ and Teacher Educators’ Perception about the Relevance and mode of Delivery of Professional Courses”. Unpublished MA thesis
- Main A. (1985). **Education Staff Development,** Great Britain, Atony Rowe, Ltd.
- Merryfield et al (1997). **Preparing Teachers to Teach Global Perspectives: A Handbook for Teacher Educators,** USA, Crowin Press, Inc.
- Misner P. (1950). **In- Service Training Comes of Age in the Journal of Teachers Education** (1-2).
- MOE (1994). **Education and Training Policy** St. George Printing Press A.A.
- _____ (2002). **The Education and Training Policy and its Implementation –** Addis Ababa.
- _____ (2005) **Education Statistics Annual Abstract.** St. George Printing Press Addis Abba.
- Nigusie Kassahun (2002). **“Concept of Teaching: The case of Higher Institutions’ Instructors”.** Vol. 10, No-1. Addis Ababa IER.
- Ohles J. (1970). **Introduction to Teaching,** USA, Random house, Inc
- Rahel Abraha (2006). “In-service Training and its Impacts on the Practices of Active Learning in English Classroom”: The case of People in need Project in SNNPR. Unpublished MA thesis.
- Rubin L. (1971) **Improving in-service Education: Proposals and Procedures for Change,** USA, Allyn and Becon, Inc.
- Spears H. (1957). **Curriculum Planning Through In-Service Training,** USA, Prentice Hall INC.
- አዲስ አበባ ከተማ አስተዳደር ት/ቢ.ሮ (1997 ዓ.ም) 13ኛው የትምህርት ጉባኤ ሪፖርት አዲስ አበባ

Appendix-A

Addis Ababa University
School of Graduate Studies
College of Education
Department of Curriculum and Teachers Professional
Development Studies

Questionnaire to be filled by Secondary School Teachers

This questionnaire is designed to survey the contribution of in-service training for the professional development of secondary school teachers. The success of this study to a great extent depends on your genuine responses. Therefore, you are kindly requested to be honest and give responses to all items provided in this questionnaire.

In responding to the questionnaire, please note the following:

1. All question raised here are of equal importance to attain the objectives of the study. Failure to complete any of them will affect the overall study.
2. You are not required to write your name.
3. All your responses will be kept confidential and used only for academic purpose.
4. Mark "X" for questions with options, and write your opinion for questions with open-ended.

Part One: Personal Data

1. Sub-city _____ School _____
2. Sex a) Male b) Female
3. Age a) 20-25 b) 26-30 c) 31-35
 d) 36-40 e) 41 and above
4. Year of service a) in teaching _____
 b) As a director _____
 c) Any other _____

8. At what level is **mostly** the in-service training or the secondary school teachers is planned?

- a) At school level b) at kebele level
 c) At zone level d) at sub-city level
 e) At regional level f) at Federal level

9. In the past two years have you participated in any form of in-service training?

- a) Yes b) No

10. If your response to question number 3 is 'Yes' please indicate the form, rate of your participation and organizer of the training by 'X' mark

	Training given	Frequency of Participation				Organizer
		Once	Twice	Three times	Four and above	
10.1	Short -term training (e.g. workshop)					
10.2	Visiting other schools					
10.3	Summer course program					
10.4	Distance education					
10.5	Other					

11. Do you believe that the in-service training given to you has a contribution to your professional development? a) Yes b) No

12. If your answer to question number 9 is 'Yes', then what kinds of developments did you get as a result of the in-service training?

- a) Up grading your qualification b) increase in salary
 c) A shift to higher level d) enhancing your teaching
 e) All over classroom management in your teaching
 f) If there is any other please state it _____

13. If your response to question number 9 is "No", then please mention the problem _____

14. Are there different in service training programs to up-grade the qualification of teachers?

a) Yes b) No

15. What kind of in- service training do teachers **mostly** use to up-grade their qualification (go to from lower level to higher level in their qualification) in the region?

a) summer course program b) evening (extension) program

c) distance program d) systematically arranged classes

Along with teaching

e) If any other, please mention _____

16. Are there clear in- service training strategies and guidelines?

a) Yes b) No

17. Are training programs in line with school development plans and teachers need? a) Yes b) No

18. Are there adequate training facilities and materials?

a) Yes b) No

19. Are there adequate budget for in service training?

a) Yes b) No

20. Are there competent and trained in service training personnel?

a) Yes b) No

21. Is a convenient and sufficient time allocated for in service training programs? a) Yes b) No

22. Do the feedback got from evaluation is used for further planning

a) Yes b) No

23. Are evaluations made to check whether the in- service training programs are achieving the intended results?

a) Yes b) No

24. Are there barriers that hinder the effectiveness of in- service training of teachers? a) Yes b) No

25. What are the major barriers that **mostly** hinder the effectiveness of in service training for teachers?

a) Financial problem b) problem of expertise

c) Material problem d) time problem

e) Lack of interest on the side of the teacher

f) Lack of relevance of the training

g) If any other, please mention it _____

26. Is there an induction program for beginning teachers?

a) Yes

b) No

27. Do you think that induction program for beginning teachers play a great role for their future professional development?

a) Yes

b) No

28. If your answer is to question number 27 is 'No', then please state you reason _____

Part Three: General Information

29. In your opinion, what are the main contributions of teachers' in -service training programs? _____

30. In your opinion, what are the main problems of teachers' in- service training programs? _____

31. What should be done to improve the planning, organization and conducting the in-service training in the city administration? _____

32. Your suggestion on the over all in-service training programmes _____

Appendix-B

Addis Ababa University

School of Graduate Studies College of Education

Department of Curriculum and Teachers Professional Development Studies

Interview Questions with Secondary School Directors

The purpose of this interview is to survey the contribution of in-service training for the professional development of secondary school teacher in Addis Ababa city administration.

1. Which types of INSET programmes for teachers are arranged in your school?
2. Do you think that the INSET programmes given for teachers have contribution to their professional development?
3. What kinds of professional developments are observed on teachers in your school as a result of in-service training programmes?
4. In your opinion, does the in-service training given for secondary school teachers enhance the teaching learning process?
5. Is there an induction program for beginning teachers in your school?
6. In your opinion, what is the significance of an induction program for beginning teachers?
7. In your opinion, what should be done to improve the quality of in-service training programmes for teachers?

Appendix - C

Addis Ababa University

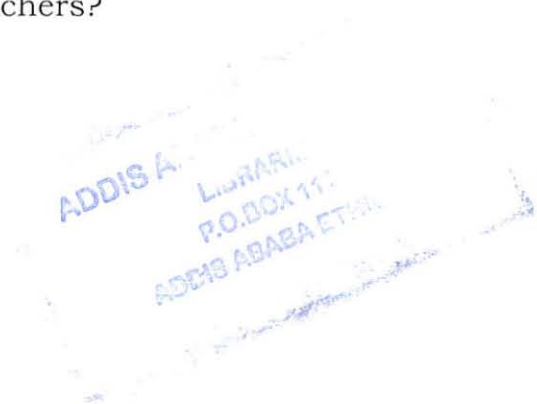
School of Graduate Studies College of Education

Department of Curriculum and Teachers Professional Development Studies

Interview Questions with sub-city education and training experts

The purpose of this interview is to survey the contribution of in-service training for the professional development of secondary school teachers in Addis Ababa city administration.

1. Is there a clear in-service training policy and guide lines in the city administration?
2. Are the objectives of the in-service training in line with the interests of teachers and school developmental plans?
3. What kinds of in-service training programs are arranged for teacher in your sub-city?
4. In your opinion, did the in-service training given for secondary school teachers have contribution for their overall professional development?
5. What advantages do secondary school teachers in your sub-city got from in-service training programs?
6. What kinds of evaluation mechanisms have you used to assess the impact of training programs?
7. At what level is the in-service training program for secondary school teachers planned?
8. In your opinion, what are the major barriers that hinder the effectiveness of in-service training programs?
9. Are in-service training programs equally accessible to all teachers in your sub-city?
10. Is there an induction program for new teachers?
11. In your opinion, what is the contribution of an induction program for the professional development of new teachers?



Declaration

I here by declare that this thesis is my original work, and has not been presented for a degree in any other University and that all sources of materials used for the thesis have been fully acknowledged.

Name: Degusew Tesema

Signature: _____

Date: 13/07/07

This thesis has been submitted for examination with my approval as University advisor

Name: Lemma Setegn

Signature: _____

Date: 13/07/07