

THE EFFECT OF PEDAGOGICAL CENTERS ON FIRST CYCLE
PRIMARY SCHOOLS IN IMPLEMENTING THE NEW
CURRICULUM: THE CASE OF AMHARA REGION

BY
ANIMAW ENTEWOW

A Thesis Submitted to the School of Graduate Studies of Addis Ababa
University in Partial Fulfillment of the Requirements for the Degree
of Master of Arts in Curriculum and Instruction

June, 2000

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

**THE EFFECT OF PEDAGOGICAL CENTERS ON FIRST
CYCLE PRIMARY SCHOOLS IN IMPLEMENTING THE
NEW CURRICULUM : THE CASE OF AMHARA
REGION**

By

ANIMAW ENTEWOW

Approved By Board of Examiners

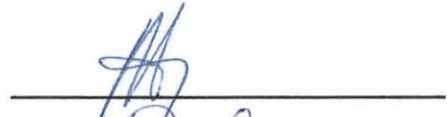

**CHAIRMAN, DEPARTMENT
GRADUATE COMMITTEE**


ADVISOR


EXAMINER, EXTERNAL


EXAMINER, INTERNAL









ACKNOWLEDGEMENT

I would like to express my heart-felt thanks to my advisor, Amare Asgedom (Asso. Professor in Addis Ababa University), for his unreserved guidance and critical comments directed towards the realization of this thesis.

I would also like to extend my gratitude to Ato Amare Bizuneh and Ato Alebachew Mekonnen, senior experts in the Ministry of Education, for their cooperation in providing the necessary official documents. I thank my dear wife Alemitu Tiruneh, for her patience and encouragement to complete my study. I am also thankful to W/o Tiruye Workie who sacrificed her leisure time to type the final manuscript of the thesis.

Finally, I am indebted to the School of Graduate Studies, Addis Ababa University, for covering the expenses incurred in this research work.

CONTENTS

CHAPTERS	PAGE
ACKNOWLEDGMENT	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	v
ABSTRACT	vi
CHAPTER ONE - INTRODUCTION	1
1.1 Background of the Problem	1
1.2 Statement of the Problem	5
1.3 Significance of the Study	8
1.4 Delimitation of the Study	9
1.5 Limitation of the Study	10
1.6 Operational Definitions of Terms	11
CHAPTER TWO - REVIEW OF RELATED LITERATURE	12
2.1 The Concept of Instructional Materials	12
2.2 Background and Use of Instructional Materials in the Teaching- Learning Process.	14
2.3 The Need for Instructional Materials Centers in Education System	17
2.4 The Development and Function of Instructional Materials Centers in the Education system of Some Countries	20
2.5 Background and Justification for the Establishment of School Pedagogical Centers in the Ethiopian Education System	23
2.6 The Establishment of School Pedagogical Centers and Their Functions	32
2.7 The Preparation and Utilization of Instructional Materials in a Pedagogical Center.	38

CHAPTERS	PAGE
CHAPTER THREE - RESEARCH DESIGN AND METHODOLOGY	45
3.1 Sources of Data	45
3.2 Sampling Procedures	46
3.3 Instruments of Data Collection	47
3.4 Pretest of the Instrument	49
3.5 Strategies of Data Analysis	49
CHAPTER FOUR - PRESENTATION, ANALYSIS AND DISCUSSION OF THE FINDINGS	51
4.1 Analysis of Data and Discussion	51
4.1.1. The Respondents' Characteristics	52
4.1.2. Availability of Instructional Materials in the School Pedagogical Centers.	54
4.1.3. Participation of Teachers in Preparing and Utilizing Instructional Material in School Pedagogical Centers	67
4.1.4 Availability of Equipment in School Pedagogical Centers.	72
4.1.5 Support School Pedagogical Centers Get from School Management	79
4.1.6 Attention Given to School Pedagogical Centers by Higher Management and the Community	82
4.1.7 Functions of Pedagogical Centers	94
CHAPTER FIVE - SUMMARY , CONCLUSION AND RECOMMENDATION	104
5.1 Summary	104
5.2 Conclusions	107
5.3 Recommendations	111
BIBLIOGRAPHY	116
APPENDICES	

LIST OF TABLES

TABLES	PAGE
1. Distribution of the Respondents	47
2. Number and Percentage of Returns on Questionnaires	51
3. Characteristics of the Respondents	52
4. Availability of Instructional Materials in the School Pedagogical Centers	56
5. Types of Instructional Materials Available in the School Pedagogical Centers	58
6. The State of Training on the Functions of Pedagogical Centers	65
7. Participation of Teachers in Preparing and Utilizing Instructional Materials	68
8. Availability of Equipment in the School Pedagogical Centers	71
9. Use of Instructional Materials by Teachers	76
10. The State of Support the School Management Provides to the School Pedagogical Centers	80
11. The Degree of Support School Pedagogical Centers Get from Higher Management , Community and Organizations	83
12. School Pedagogical Centers' Activities	96
13. The Perceived Constraints of School Pedagogical Centers as Ranked by the Respondents and the Mean- Ranks and Rank Values of the Problems	100

ABSTRACT

As a nucleus for improvisation and innovation Pedagogical Centers create the preconditions for the effective implementation of the curriculum and the continuous improvement of the teaching - learning process. The study was, therefore, designed to assess the effect of Pedagogical Centers on the First Cycle Primary Schools in implementing the new curriculum.

The study was conducted in 24 schools as sources of information from the four Zones of the Amhara Region. Within these schools, all teachers of the self-contained class which were 154 in number, 24 school principals, 24 School Pedagogical Centers' coordinators and 32 Woreda education experts were taken as actual sources of information. The information were collected through questionnaire, interview, observation and document analysis. The data obtained were analyzed mainly using percentage and in some parts, especially for interview results, a purely qualitative discussion was employed.

The results of the study indicate that the School Pedagogical Centers have inadequate instructional materials relevant to the new curriculum. Teachers, coordinators of the School Pedagogical Centers seem to have no adequate orientation or training regarding preparation and utilization of instructional materials. In this connection, low participation of teachers in regarding and utilizing instructional materials in their teaching activity has been found. It was also revealed that the support provided to the Pedagogical Centers from the school and higher management was low. No support was provided to the Centers from the community. The interview results had indicated that there was no technical, material/ financial assistance given to the Pedagogical Centers from the Central level in the system. What is important to mention

is that lack of trained manpower, lack of adequate resources, lack of in-service training of teachers and Pedagogical Centers' coordinators and absence of support and clear guidelines from the top management were the major serious problems affecting the function of Pedagogical Centers.

In light of these findings, it is necessary to give due attention and make great effort to strengthen the School Pedagogical Centers with financial, materials and trained manpower. In addition, there seems to be a need for providing training to teachers and coordinators of pedagogical Centers on preparing and utilizing of instructional materials as well as on the other functions of the Pedagogical Centers. That is, continuous and periodical school- based training is necessary. Besides, higher educational institutions need to be encouraged to arrange training programs in order to train specialists who could have expertise in coordinating the activities of Pedagogical Centers.

CHAPTER I

1. INTRODUCTION

1.1. Background of the problem

Education, as one of the major concerns of a society at every level of development, is aimed at fulfilling the needs of a given society. The real social, economic and cultural issues of a society have to be reflected in the existing education system of a country. The development of any nation or society is, therefore, largely acknowledged to be a function of education. With this philosophical view in mind, Taba (1962) has noted that the first task in curriculum development process is to take into consideration the needs, interests and cultural backgrounds of learners, and the society at large.

Educational objectives can be achieved and the curriculum is considered to be relevant if and only if the learner acquires the necessary knowledge and practical skills for developing his/her living and working competencies when he/she actively participate in identifying and solving the social, economic and cultural problems of the country (Nardos, 1995; Dereje, 1998). So in order to transform knowledge, formulate and develop the needed attitudes and skills, that is, for effective realization of educational objectives, the teaching-learning process has to be carefully planned.

Educators both in developed and developing countries are more concerned with the quality of schooling and students learning gains, particularly, the quality of the teaching activity (Amare and Tassew, 1996:1). This is because in many developing countries, like Ethiopia, as

evidences indicate, the quality of education and students' achievement have declined from time to time. Different reasons are being suggested by educators for the low achievement of students in their learning. One of the factors, as McGin and his associates, cited in Amare and Tassew (1996:1), have agreed is that students fail to learn when the teaching methods and techniques teachers use in their classroom teaching are inappropriate to the students' level and ability of learning. Besides, teachers do not frequently use instructional materials relevant to their classroom instruction. Unfortunately, in our case, most of the time the student's low achievement or failure is attributed to the students themselves.

According to Sampath and others (1984:4-5) , students should not learn through the same steps of learning at the same speed. The quick students will move fast in their learning whereas the slow learners will need more time. Students also learn best in different ways and at different time. Some students may learn better through the use of different instructional materials rather than merely listening to the teacher's talk. It is also believed that the style of learning may change according to age. Moreover, students learn best if they use their senses in acquiring knowledge; and when they grow older, they may learn in a more abstract way (Wittich and Schuller, 1973; Chauhan, 1995).

As a result, teachers have to understand the existence of these background differences in students' abilities and interests. They have to realize the need for presenting different learning experiences to suit the individual differences among the students and attempt to use appropriate methods and instructional materials generated by educational technology (Sampath et al, 1984:6). In addition to other strategies , educational technology is considered to be an important mechanism for effective teaching-learning activity.

The place given to educational technology in the contemporary educational system varies from one country to the other. However, in many developing countries, like Ethiopia, a classroom instruction is almost entirely dominated by verbal communication between the teacher and the students or written communication to the students from printed materials. The teacher stands in front of the students and lectures using verbal method. He does not use other instructional materials except textbook and chalkboard. This type of learning is a one-way transmission, speaking-listening which only promotes memorization (Nardos, 1995; Amare and Tassew 1996).

According to McNeil (1990), one-way learning makes learners only passive recipients, sit in the classroom without any reaction. In such condition of teaching-learning process, the students may leave the school without acquiring adequate knowledge and practical skills to be applied in their real life.

These days, however, the modern approach of teaching-learning activity does not consider a student as a mere receiver waiting to be filled up only with facts. Rather he/she must be encouraged to explore, to ask question, to study himself/herself and to be creative. In the creation of such teaching-learning environment the center of attention is the student (Aggarwal, 1996:37). This implies that a student develops critical mind and problem-solving skill when the actual classroom instruction is a learner-centered, and not too far from the actual life of him/her. The teacher, therefore, has to consider each student as naturally active and help him/her grow according to his/her abilities. A learner becomes more active and develops higher cognitive capabilities such as independent learning and inquisitive mind when he/she is exposed to his/her environment (Nardos, 1995). To arouse the learner's interest and make

him/her active participant in the learning process, there is a need of appropriate utilization of educational technology which includes instructional materials and methods. (Amare 1995:4-6).

Though educators have given different names for instructional materials, they make ideas and concepts clear and raise learning from verbalism to clear understanding. A teacher can teach without using instructional materials, but students gain very limited experience. The absence of instructional materials, therefore, makes a significant influence on students' learning.

However, to utilize the instructional materials which encourage the maximum involvement of senses of students, and to enhance quality of education by developing professional competency of teachers, there is a need for situation where instructional materials could be produced, disseminated and utilized, where teachers could meet together to discuss on their teaching problems and exchange their experiences; where local curriculum development and research activities could be conducted; and where seminars and workshops for in-service training of teachers could be organized at school level.

It was in the light of promoting these tasks, and easing off, if not totally solving, the challenging problems of the Ethiopian education system such as quality and relevance that the idea of Pedagogical Center was introduced. Pedagogical Centers were established both at awraja and school levels. The main aim of establishing Pedagogical Centers at these levels was to provide essential supporting services which promote teachers' activity for effective classroom teaching in particular, and for implementing curriculum effectively in general (Ministry of Education, 1980).

Some of the functions for which Pedagogical Centers were established (Ministry of Education, 1980: 16-27) are: working closely and cooperatively with individuals groups and organizations in the community to sharing their knowledge, experiences and skills; and serving as centers of training for improving the professional competencies of teachers, developing local curriculum and conducting research activity, and preparing and disseminating instructional materials.

Thus, the general purpose of the study is to investigate the effect of these Pedagogical Centers in implementing the new primary school curriculum with reference to First Cycle Primary Schools in the Amhara Region.

1.2. Statement of the Problem

Throughout the history of modern education in Ethiopia, it is generally acknowledged that curriculum reform has been so common. Such trend of curriculum reform was to evolve an educational system which will reflect the real conditions, aims and aspirations of the Nation (Transitional Government of Ethiopia, 1994_o).

Despite that the numerous educational initiatives have been introduced in the Ethiopian education system, it was largely ineffective in providing quality and relevant education. At the root of such challenging problems, among other things, were an irrelevant curriculum taught through the method that focuses only a verbalism which promotes rote learning rather than critical thinking and problem-solving skills, and using inadequate instructional materials (Nardos, 1998:20).

Quality of education is defined in terms of what is taught, how it is taught, to whom it is taught, and what kind of setting is needed (Azeb, 1984; Amare and Tassew, 1996). That is, quality of education depends on the content selected and organized, the methods used by teachers, and the availability and utilization of different instructional materials. And the effectiveness of teaching -learning activity is understood in terms of the knowledge, attitudes, and skills which students acquire and develop as the result of classroom instruction . From this point of view, it is important to understand that quality of education in a given country is mainly determined by the essence of its curriculum and the process of its implementation at school level.

As one of the establishments in responding to the problem of curriculum implementation, Pedagogical Centers have received due attention in the last two decades. They were established to be used as centers for instructional resources, research activities and training. Though the Pedagogical Centers have been established in the Ethiopian education system for providing closer assistance to teachers for minimizing their problems in a classroom teaching and finally contribute to quality of education, few researches conducted focusing on Pedagogical Centers and use of instructional materials have revealed that little is known about their contribution for curriculum implementation.

However, the recent changes on the concepts and ideas of development, and the 1991 change of political power as well as the socio-economic restructuring process have necessitated changes in the Ethiopian education system to alleviate, among others, the problems of quality and relevance of the curriculum and training. In response to these challenging problems of the Ethiopian education and to meet the societal and pedagogical demands, the New Education

and Training Policy (1994) emphasizes on such approaches like problem solving , learner-centered education, etc. However, these innovations in the education system could not be realized in a classroom instruction without an optional use of instructional materials. To attain both efficient and effective outcome in the teaching-learning process, in addition to other relevant factors, the instructional materials need to be integrated into the curriculum. They should not stand apart from the teaching-learning activity and used as an additive element . This requires broad involvement, acceptance and support at all educational levels.

The purpose of this study is therefore,

1. To examine the extent to which instructional materials and equipment are made available in School Pedagogical Centers.
2. To ascertain whether or not teachers attempt to produce and use instructional materials for their classroom teaching.
3. To examine the extent to which professional supports have been provided for the operation of Pedagogical Centers by higher management (School Management, Woreda Educational Office, Zone Education Department, Region Education Bureau and Institute for Curriculum Development and Research Educational Mass Media Agency).
4. To evaluate the extent to which other organizations outside the system and the community at large participate in supporting Pedagogical Centers.
5. To examine to what extent Pedagogical Centers have realized the objectives for which they were established.
6. To evaluate to what extent the existing educational structure has given due attention for the existence of Pedagogical Center.

Generally, the reason why the study focuses on the First Cycle Primary Schools is that it is the level where we can lay good foundation as well as create interesting learning environment for the children. The early years are the most important in the whole life of the child (Grant, 1964). This study, therefore, assumes that the availability of sufficient instructional materials in each and every School Pedagogical Centers facilitates effective learning.

The Research Questions:

1. Are there sufficient instructional materials in the School Pedagogical Centers for making learning meaningful?
2. To what extent do teachers participate in the School Pedagogical Centers?
3. Are there the necessary equipment in the School Pedagogical Centers for preparing instructional materials?
4. Does the school management assist teachers to participate in preparing and utilizing instructional materials?
5. Do educational officials and experts who work at different levels supervise and support the School Pedagogical Centers?
6. Is there a link between School Pedagogical Centers and the community?
7. What are teacher's constraints in utilizing the School Pedagogical Centers?

1.3. Significance of the Study

Curriculum implementation is a troublesome task that calls for having appropriate knowledge in the field of education in general, and in curriculum and instruction in particular. At school level, curriculum implementation is often restricted by the lack of instructional materials and other instructional facilities like laboratories, libraries , etc. The unfavorable economic

environment and the resulting scarcity of instructional materials hinders the capability of schools in providing quality education. All these problems added up have significant consequences on the existing functions of School Pedagogical Centers. The fact that the study treats such a very pivotal issue may make it relevant and timely.

The results of the study may also contribute to the already existing knowledge by adding some pertinent ideas to the use of instructional materials for providing quality and relevant education. So the final purpose of this study is to point out the problem areas the School Pedagogical Centers encountered in implementing their functions, and eventually come up with some recommendations which are helpful to improve the activities of School Pedagogical Centers.

The study may also provoke other researchers to conduct in-depth study on the effect of School Pedagogical Centers in implementing the new primary curriculum.

1.4. Delimitation of the Study

The extent of this study covers only the Amhara Region as a center of its operation. This is because as per the Education Statistics Annual Abstract 1991 E.C. the concentration of primary schools in this Region was second to Oromia on national scale. The second reason to delimit the study to the above mentioned Region is that the researcher was born and brought-up there. Besides he has some practical observations as he was working in various responsible positions in the Region. As a result, pertinent information can be accessible than of the other Regions. The researcher feels that the reason for selecting the Amhara Region as a sole setting

for his research work will have no significant impact on the final outcome of the study it is hoped.

The study is also based on exclusive experiences of formal education at primary school level. The generalizations of the results, therefore, may not equally serve for both formal and non-formal educational practices. It will not also equally applicable for formal educational practices in all Regions of the Nation.

1.5. Limitation of the Study

Since this study has not been conducted on national scale, the findings which would have been the basis for fair generalization are not supposed to be free from some limitations which are likely to appear from the same study. In fact, the basis taken into consideration for not undertaking a nation-wide based research was due, principally, to time constraints and unmanageability of the size and number of primary schools.

The next restriction of the study, upto the researcher best knowledge, is shortage of materials which are based on exhaustive research work on this topic both in other countries and Ethiopian context, and a few source materials were repeatedly used. The last encounter the researcher can state is that some of the respondents almost found not willing to fill out and return the questionnaires on the very expected time. In general, in carrying out the study, the researcher did not find his walks free from these limitations. However, he tried to overcome all these pit falls and finally emerged with this outcome.

1.6. Operational Definitions of Terms

In order to provide common understanding of this study, the following main terms were defined.

1. Curriculum implementation:- refers to an extensive process of putting a curriculum into practice at school level after it has been developed and piloted.
2. Equipment:- as used in this context, it includes instruments used for preparing instructional materials in Pedagogical Centers from local materials.
3. First Cycle Primary School:- the term used here refers to a school that covers all grades 1 to 4.
4. Instructional Materials:- these refer to any kind of material, audio or visual or audio-visual used both by a teacher and a student to upgrade the quality of student learning. They include all local made and imported audio and visual materials.

CHAPTER II

2. REVIEW OF RELATED LITERATURE

Having identified the problem and purpose of the study, this chapter examines all information pertinent to the improvement of Pedagogical Center and the employment of instructional materials including a theoretical framework which is a central concept for conducting this study.

2.1. The Concept of Instructional Materials

The concept of instructional materials, though expressed in different words by different educators, denotes the same meaning in the literatures. They conceived the concept with slight variation reflecting its evolution. For instance, Kindred (1968:235) and Brown and others (1973) have viewed instructional materials as "tools used in a classroom instruction." In this connection, Sampath and others (1984:18) have defined instructional materials as "the different types of tools that appeal to the sense of hearing and vision and are used in classrooms for presentation of abstract information. Similarly, Sharp (1975:53) has stated that "they are aids the teacher uses to substitute for firsthand experiences." On the other hand, Walklin (1982:261) has attempted to tell us that instructional materials are "the concrete objects which lead students to personal experiences."

A relatively comprehensive definition of instructional materials has been given by Spencer (1988:22). According to him, they include the five senses that can be used to receive a

message so that it can be seen, heard, touched, smelled or tasted. From this definition, one can understand that communication in instruction can be effective when one or more than one channels are used to stimulate more senses directly and immediately than one sense organ only. Amare (1995:164-165) have also given an inclusive definition for instructional materials. According to him, instructional materials refer to "both man-made and natural elements that could carry educational information from a source to a receiver and vice-versa." And based on his definition, Amare (1995_b, 164-165) has attempted to categorize instructional materials as follows:

1. Persons- involving teachers, discussion groups, guest speakers, etc.
2. Print- textbooks, reference books, reading materials, etc.
3. Audio- radio, recordings etc.
4. Audio-visual- television, video, motion picture, etc.
5. Visual- pictures, diagrams, charts, etc.
6. Inactive Media-models, simulations, real objects, field trips, laboratories, demonstrations, etc.

According to Amare's definition, man-made instructional materials refer to resources like students' textbooks, teacher's guides, different laboratory and Pedagogical Center equipment, models, different pictorial descriptions, radio, television, film computer, video etc. On the other hand, natural objects refer to instructional materials such as teachers, discussion groups, guest speakers, plants, animals, natural landscape rocks, soils etc. Thus, one can deduce that instructional materials range from a piece of chalk to a computer, from a line drawing to a multimedia center which can contain films slid, television, etc. (Kindred, 1968; Kassambira, 1993).

Generally, from the aforementioned definitions, one can easily understand that instructional materials are both natural and man made elements that appeal to at least one of the sense organs and used to transmit the intended learning objectives to the appropriate audience targeted . In this connection, Walklin (1982:261) has attested that new ideas and unfamiliar information cannot be conveyed by words alone. For words to have meaning, they must be related to personal experiences or to known concrete objects.

2.2. Background and Use of Instructional Materials in the Teaching-Learning Process.

For a long time, education was conceived as a process of transmitting factual knowledge. Most teaching-learning activities depended almost entirely on verbal communication. That is, verbalism was predominantly used as a medium of instruction to which the children were forced to memorize without understanding the concept of the material they had already covered. Memorizing the facts was sufficient and was thought to be successful learning. Moreover, little attention was given to the eagerness, curiosity and ability of the learner. The teacher, therefore , had little or no sensory instructional materials to supplement his/her verbal teaching. It was so teacher-centered that the teacher adopted an authoritarian attitude (Wittich and Schuller, 1973; Sampath et al, 1984. Romizomski, 1981).

However, attempts were made to alter this verbal method of teaching by requiring learners to relate the information they acquired to their daily resolution of immediate problems of working and making-a-living. In this connection, some educators had struggled long ago to make learning realistic. Amongst these, a Dutch humanist, theologian and writer, Erasmus (1466-

1536) discouraged memorization as a technique of learning and advocated that children should learn through the aid of pictures or other visual materials. In support of this idea, Comenius (1592-1670) prepared a book known as "The World of Sense Objects", the first book which contains about 150 pictures on aspects of everyday life. Comenius theory was that " Let the picture be a source of delight to the children and let them become familiar with them before they enter school (Aggarwal, 1996: 295-296).

In the same view, Rousseau (1712-1778) stressed on the need for pictures and other play materials for childhood education. He criticized teacher-centered method of teaching. According to him, the teaching-learning process must be based on the learner's natural curiosity. It must be directed to the need and interest of the learners. Similar stand is shared by Pestalozzi (1756-1877) who emphasized the importance of understanding children's intellectual , moral, and personal needs. He proposed instructional materials that involved observation, sense experience or perception (Mitzel cited in Azeb, 1998; Sampath et al. 1984:18).

As a result of this and other relevant factors, the shift in emphasis from the teacher to the learner as the central figure in the process of education, and the connecting of instructional activities with the realization of specific learning outcomes has led the reassessment of teacher's role in a classroom instruction.

The role of the teacher as the only transmitter of knowledge has gained less importance. On the other hand, the learner-centered method, which emphasizes on the active participation of the learner with optimum use of instructional materials, have been introduced without minimizing the role of the teacher. It promotes quality of human interaction and the degree of

interpersonal intimacy during a classroom instruction (Sampath et al, 1984:6-7). Besides, the need for instructional technology has become greater when teachers started to use the learner-centered education. However, although efforts on the use of concrete instructional materials were made, according to Aggarwal (1996:296), intensive development of audio-visual materials has started recently, in the twenties of the 20th century.

These days, however, it is argued that the introduction of instructional technology in the education system helps for increasing efficiency of education in general, and classroom instruction in particular. Romizowski (1981) and Sampath and others (1984) have pointed out that though verbal and written communication channels continue to play important role in classroom instruction, students of to date are learning with the help of different technological devices such as radio , television, film, computer, etc., as well as from simple devices such as pictures, real objects, charts, teacher-made diagrams, visit to places outside the class, etc.

These instructional materials are particularly of great importance in facilitating effective learning. They play a vital role in students' understanding and conceptual development. Moreover, they can stop the bad effects of verbalistic method of teaching, and create interesting classroom environment to students. For their advantages, Sless (1981), Mckean (1971) and Walklin (1982) have argued that instructional materials attract attention, arouse interest, give an accurate impression of the concepts, stimulate imagination, save teaching time , etc. According to these writers, instructional materials can transmit the message to the students in a more effective and understandable way than straight-forward lecturing or reading.

Effective utilization of instructional materials can reduce problems such as boredom and inattention and promote the desire to learn. They have great influence in modifying and

changing the students' behavior and attitude. They also broaden their outlook and intellectual capacity that enable them to analyze, compare and relate what they have learnt in the classroom with the outside world experiences. Teaching with instructional materials is a process of bringing of the world into a classroom and the classroom into the world (Amare, 1995:2).

However, to utilize the different instructional materials in the teaching-learning process, there is a need for situation, where such materials could be produced and utilized in schools.

2.3. The Need for Instructional Materials Centers in the Education System

The development of instructional technology that has provided learning materials that the printed materials can no longer meet, and the emphasis given towards the extensive utilization of instructional media in the teaching-learning activity resulted the evolution of Instructional Materials Center at school, district, regional and central level in the education system (Shores, 1960; Pearson, 1972). Regarding to the emergence of the Center, Brown and Others (1983:30) have attempted to tell us that the idea of proper Instructional Material Center has evolved in the education system with the concept of individualized learning whose emphasis is to provide all students the experience and resources they need to work according to their abilities and interest in which they can succeed in their own rates of progress. Individualized learning, as explained by Klugman (1970:64) and Wittich and Schuller 1973:64), is that the child is able to initiate, plan, and carry out projects by himself/herself or with others with occasional teacher help or guidance when and as necessary. According to Klugman, helping children to learn how to plan, organize and select instructional materials is an important skill of a teacher in his/her teaching.

Different writers have similarly conceived the concept of Instructional Material Center. For instance Brown and others (1983:31) have defined Instructional Materials Center as " an institutional unit that coordinates a number of media-related services for teachers and students." In this connection, Sampath and others (1984:70) have defined it as "a center which serves a school system, and provides all necessary materials for both teachers and students."

From the above definitions one can easily understand that Instructional Materials Center is a center that houses all instructional materials and accompanying services by putting them under favorable administrative organization. According to Shores (1960:12) the establishment of Instructional Materials Center is needed for producing, housing, organizing and disseminating of instructional materials for improving students' learning. It lets learners achieve learning outcomes in a more flexible and independent manner based on their abilities and interests than the traditional learning methodology-- teacher-centered. This indicates that the Center need to be organized in such a way that different standards with varied learning style could make preferable selection to their needs and interests. In a well organized center of instructional materials , students could have access to all kinds of interrelated learning resources (Wittich and Schuller, 1973).

A center of instructional materials recommended for and available within a single school may vary according to the range of grade level, financial support provided, needs and abilities of the students, curricular emphasis, and the number and qualification of teachers. However, a typical Instructional Materials Center of a school includes certain resources and services that enable the teacher to teach and the students to learn. (Brown et al, 1983). According to them,

some of the resources and services that the Center includes are: catalogs and lists of all types of instructional materials directly from the school, as well as from district, regional and other resources; many types of learning materials and equipment designed for a teacher to take to his classroom teaching, and for students to develop independent learning; proper places where the teacher plan and prepare his/her lesson near the material; and for students to work a variety of learning activities independently; facilities in which both teachers and the students may produce instructional materials such as recording rooms, workshops, etc., and trained personnel to produce instructional materials.

The resources and accommodation of a center listed above emphasize on activities that are enabling students to learn and lead them to a process of creativity. Therefore, good organization, adequate trained staff, a well lighted environment and a space in which to carry out essential planning, maintenance, and counseling tasks are the essentials of modern Instructional Materials Center (Brown et al, 1983:32).

Although instructional materials and services available within a school center of instructional materials are the top priority, additional materials and services like short-term loan of material, experts supervisory assistance in improving instructional materials and utilization practice, producing and reproducing certain materials, workshops and in-service training program for teachers and coordinators, etc., can be supplied by government or non-government organizations or commercial agencies and individuals (Shores, 1960; Brown et al, 1983).

This reminds us that cooperative effort in establishing and organizing Instructional Material Centers at various levels, particularly, at school level, helps to reduce costs and at the same time expands the quantity and quality of instructional materials in the teaching-learning process.

In the Ethiopian situation, though it is understood that Pedagogical Centers are important for enriching the curriculum, the survey made by Amare (1999) on the availability and use of instructional materials in Tigray showed that inadequate attention has been given by the higher management to strengthen these Centers. Besides, the surveys made by Addis Ababa University students in school of Addis Ababa, as reported by Amare and Tassew (1996), have ascertained that the School Pedagogical Centers have been affected by shortage of budget, trained manpower, instructional materials and space.

In reality, however, without the presence of adequate instructional materials and adequate training on technical aspects regarding instructional materials production and utilization, it is difficult to say that educational objectives have been properly achieved by the targeted audience. Thus, the need for establishing and organizing resource centers into schools with adequately trained manpower is to be stressed for implementing the curriculum effectively.

2.4. The Development and Function of Instructional Materials Center in the Education System of Some Countries.

To alter the traditional way of learning-- rote learning, new trends such as learner-centered education, problem-solving approach, the use of multimedia in a classroom instruction, etc. have become the important components of the teaching-learning activity. The development of

instructional technology and the shift of teacher-centered to learner-centered education have also added the importance of what are now differently called as audio visual aids, educational media, educational resource, instructional materials, etc. These materials are used as tools both for teaching and learning activities (Amare and Tassew, 1996:12). According to Osuala (cited in Amare and Tassew, 1996), they include all the materials which are manipulated, seen, heard, read and talk about plus the instruments which facilitate such activities.

Centers for producing and delivering such materials started to become important after 1960s. However, it seems difficult to tell exactly when and where these centers were established. Some believe that a library is the oldest education media center, but libraries, as universally accepted, are organized mainly for books or other forms of printed materials or other little forms of non-verbal resource materials (Amare and Tassew, 1996). According to Pearson, (1972), the introduction of new enriching instructional materials and other equipment and facilities to its books and periodical collection had changed the traditional library to a learning resource centers. These centers can be used as places where teachers develop skills and knowledge for developing and using of new instructional materials (Adams, 1975:163). They are also seen as places where students learn by their own.

Though Instructional Materials Centers are known by different names in many countries, they primarily aim at meeting the same objective-- facilitating students' learning and developing teachers' professional competencies for effective functioning in the educational system (Adams, 1975:215). For instance, in Great Britain, the name 'Teachers' Center' is commonly used (Thornbury, 1973, Adams, 1975). In the United States of America the terms such as 'Resource Center', 'Learning Center', 'Media Center' and 'Teachers' Center' are interchangeably used (Brown et al, 1983:31; Adams, 1975).

However, the Centers both in Britain and United States of America were established to bring educational changes through the professional development of teachers. The Teachers' Centers in Britain were first established in secondary schools by the teachers themselves on voluntary basis . They were established to train new teachers to carry on school-based curriculum development. This helped the new teachers to develop self confidence and follow the program of the Centers with interest. This trend also helped to establish the Centers at elementary school level in Britain by the secondary school teachers (Thornbury, 1973).

Regarding the function of the Centers in Britain and United States of America, Adams (1975) has stated that they had many similar activities such as developing teaching aids, sharing ideas among teachers and encouraging teachers to be change agents. However, though they had similar functions both in Britain and United States of America, their emphasis was different. In the United States of America, their focus was in teacher education while in Britain the emphasis of the Centers was on curriculum development. So the Centers in both countries have become agency for curriculum innovation and professional development of teachers.

Countries like Namibia and Pakistan use the name 'Teacher Resource Center' with the primary aim of improving the quality of students' learning experiences through the professional development of teachers (Ministry of Education and Culture of Namibia, 1996:1; Graig, Kraft and Plessis, 1998:123). In Kenya, it is known as 'Teacher Advisory Center', and in Nigeria ' National Education Technology Center' (Amare and Tassew, 1996:12). In 1980, Papua New Guinea established a center called ' Educational Resource Center' in its Southern Highlands Province for the main purpose of in-service training and support of teachers (Graig, Kraft and Plessis, 1998).

In Ethiopia much is not known whether or not such centers are represented by Pedagogical Center or Educational Material Production and Distribution Agency (EMPDA)-- which produces, purchases and distributes educational materials; and Educational Mass Media Agency (EMA)-- which complements the classroom instruction both at primary and secondary levels of education (Amare and Tassew, 1996). However, a few studies conducted by educators and students of Addis Ababa University, for instance, Amare and Tassew (1996), Fantu (1992), Belayneh (1991) and Alemu (1991) have tried to relate Pedagogical Centers to Resources Centers or Teachers' Centers established in the other countries.

2.5. Background and Justification for the Establishment of Pedagogical Center in the Ethiopian Education System.

2.5.1. Historical Background

Giving due consideration to the role of instructional materials in the Ethiopian educational system is a very recent phenomenon. Modern education in the Country started about a century (Abebe, 1991; Teshome, 1979; Meaza, 1966). Since then and until about the 1940s, the educational performance in Ethiopia was practiced without any formal curriculum developed by Ethiopian educators (Abebe, 1991; Tekeste, 1990). However, later, with the recognition of the importance of including different subject areas in the curriculum and making the system domestic, attempts were made to develop curricular materials under the possible participation of Ethiopian educators.

Despite such a tremendous attempt to indigenize the educational system, it was highly criticized of being largely based on foreign experiences and being less relevant to the objective realities of the Nation and Nationalities in general, and students' backgrounds in particular (Transitional Government of Ethiopia 1994_a; Abebe 1991).

In addition, no well organized units had been established at different levels of the system which were used as centers to bring teachers and other educators for discussing on the existed curriculum and sharing their experiences to improve the quality of the teaching-learning process. Experienced teachers had no any opportunity to come together and exchange their knowledge, experiences and skills. But in such non-encouraging conditions of the system, there was a high professional expectation from teachers for improving the quality of education (Ministry of Education, 1980; 1982).

It seems with this point in mind that the then Educational Offices of Provinces had made attempts to orient the new teachers graduated from the Teacher Training Institutes. A six week course was offered in the form of in-service training program. The main purpose of the program was to familiarize the new teachers with the economic, historical, cultural and environmental conditions as well as the educational problems and issues related to their respective regions. It had also given the new teachers the opportunity to share their knowledge, skill, new ideas and experiences through discussion forums and group project assignments. Moreover, the program had dealt with the production and utilization of teaching aids for a classroom teaching (Ministry of Education, 1982:1-2).

The diffusion of educational media in the Ethiopian education system had been first recognized by the Ministry of Education and Fine Arts in the 1950s. It was in 1953 that the first Audio-

Visual Center in the Ethiopian education system had been established by the decision of the Ministry of Education and Fine Arts with the donation obtained from United States Agency for International Development (USAID) (Teshome , 1998:71). The main objective of the Center was to produce local textbooks, manuals, wall charts and other graphic materials and films (Tesfaye, 1990).

As pointed out by Kebede (cited in Teshome, 1998:71) , the Center was equipped with audio-visual materials and photographic and film facilities as well as printing press. Not only the Ministry of Education and Fine Arts but also other development ministries and agencies were beneficiaries from the Audio-Visual Center. This was because that quality colored posters and charts produced in the Center had become popular for use in agriculture, health, and for other missions. As a result, the novelty and attractiveness of the audio-visual materials produced in the Center had succeeded in drawing the attention of a large audience both in villages and schools (Teshome, 1998).

However, due to its incapability of meeting the growing printing requirement of the Ministry of Education and Fine Arts as well as the withdrawal of USAID from the Center, the Audio-visual Center ceased its function in 1964 (Tesfaye, 1990).

Six years after the previous Audio-visual Center had been closed, in 1970, the idea of Teachers' Center was created in the then Gonder Province by the Head of English Language Department at Gondar Secondary School (Ministry of Education, 1977; Amare and Tassew, 1996) . The origin of the idea was the deterioration of English language standard at secondary schools in the Country. The Department, then suggested that an experimental program of English language supervision has to be organized at elementary school level in the Province.

The objective of the program was to start regular supervision for English language teachers by a qualified native speaker in as many of the elementary schools in the Province as possible (Ministry of Education, 1977:7-8).

To perform this supervisory task of English language teaching at elementary schools, the Head of English Language Department from Gondar Secondary School was assigned in the Provincial Education Office as an English language supervisor with joint agreement between the Ministry of Education and Fine Arts and the British Council. However, after a few weeks of implementing the new program, it was understood that only lesson observation and general guidance on the teaching methodology in a school could not solve the problem. Practically, a wider range of professional support and practical assistance was needed than occasional visit by a single supervisor (Ministry of Education, 1977:7).

As a result, a small English Language Center was organized in the Provincial Education Office for providing necessary and practical support for the language teachers of elementary schools in the Province. The functions of the Center were: continuing an active program of supervision for the schools in the Province so as to link the task with the actual needs of teachers and schools; controlling the distribution of English textbook and equipment; providing feedback for the Teacher Training Institutes and the Curriculum Department of the Ministry of Education and Fine Arts; preparing and displaying relevant teaching aids; devising supplementary guide notes which deal with observed problems of the teaching methodology; and preparing worksheets to help teachers for their own English studies (Ministry of Education, 1977).

Accordingly, all English language teachers were encouraged to come to the Center with their English language teaching problems and new ideas. Furthermore, teaching aids and relevant notes on the teaching methodology were prepared in this Center and distributed to all schools in the Province. Besides, a library service was organized in the Center with generous help from the British Council, the United States Information Service, individuals and organizations in Ethiopia and from abroad. Books were given on loan system all over the Province. So every elementary schools in the Province had sufficient supply of textbooks and equipment, and reference notes on teaching methodology and teaching aids preparation (Ministry of Education, 1977:7-8).

However, the support of the Center for the schools was highly restricted by the shortage of available funds and lack of materials for preparing teaching aids. No special funds were available to buy library books and prepare materials for the new project. Nevertheless, the Center had tried to use whatever materials locally available rather than to rely on outside sources. This succession growing of the practical value of the Center made the Provincial Education Officials less hesitant to allocate money for the provision of better facilities for the Center (Ministry of Education, 1977:8).

Such restricted support service to only English language teaching, however, created public demand that such service should be extended to cover all the elementary school subjects. And an Ethiopian supervisor was assigned in the Center for facilitating the support to other subjects (Ministry of Education, 1977:9-10).

Following the Gondar Teachers' Center, two other centers were established both in the then Wollo and Gamo Gofa Provinces. The Dessie Center, in Wollo Province, was run with the

help of a British Volunteer English language teacher. It has been doing excellent work in the in-service training of English teachers and the supply of teaching aids and notes on the methodology and preparation of teaching aids. However, it ceased its function after the British Volunteer teacher had left at the end of his contract. On the other hand, the Arba Minch Center, in Gamo Gofa Province, was also doing valuable work with the help of an Irish Sister, who had been teaching in the local secondary school, in providing library service and preparing innovative teaching resources. But the Center was closed in the mid 1976 (Ministry of Education 1977:11 - 12).

Generally, though the development of Teachers' Center in the Ethiopian education system suffered from lack of whole hearted central and local support, the establishment of Gondar, Arba Minch and Dessie Teachers' Centers with the purpose of assisting teachers for improving their classroom teaching was the origin of the Teachers' Center concept in the Ethiopian education system. These early experiences of Teacher's Center in providing support to teachers helped for the emergence of Pedagogical Center in the system.

It was seven years after the Gondar Teachers' Center had been established that the Pedagogical Center became one of the components of the Ethiopian education system in providing supports for improving the quality of education and thereby to the attainment of the educational goals of the Country. The Pedagogical Centers were first established at Awraja level. The first Awraja Pedagogical Centers were taking shape in 1977. In 1977-1979, about 106 Awraja Pedagogical Centers, one in every Awraja, were constructed all over the Nation (Ministry of Education, 1988).

2.5.2. Justification for the Establishment of Pedagogical Center in the Ethiopian Education System

It is clearly understood that poor countries are characterized by complex educational programs like quality, equity, access etc. (Amare, 1998:289). According to the Ministry of Education (1988:3), the Ethiopian educational system prior to the 1974 revolution was subjected to a number of problems. The child had been deprived of the development of his/her inherent potentialities to solve problems, to engage in creative activities and to become a self-supporting individual. Besides, many teachers were untrained and underqualified. There were no possibilities for many teachers to improve their professional competencies. The majority of the schools were also ill-equipped with educational facilities (laboratories, Pedagogical Centers, etc.). Teacher-centered education, which makes the teacher a giver and the student a receiver was the only method for classroom instruction. There were no establishments or programs that could bring teachers and other educators for sharing problems, seeking common solutions, or exchanging their knowledge, skills, and experiences. Most of the supervisors were also unable to assist and guide teachers in the teaching -learning process due to lack of facilities they need. They were occupied with bureaucratic work rather than with instructional activities.

It was in response to these acute problems of education that the Ministry of Education took fundamental reform steps after 1974. One of the major reform steps was the establishment of Pedagogical Center at Awraja level. (Ministry of Education, 1980). The decision of the Ministry of Education to establish Awraja Pedagogical Centers throughout the Country was initiated by an urgent need for the provision of facilities at the rural level to develop quality of education (Amare and Tassew, 1996:14; Ministry of Education, 1977).

The rationale for the establishment of Awraja Pedagogical Centers in the Ethiopian education system has indicated that these Pedagogical Centers were more than the Audio-visual Center which mainly focused on the production of educational materials and equipment (Amare and Tassew, 1996, 14). The justifications for the need of Awraja Pedagogical Center given by the Ministry of Education (1988:5-6) were as follows:

1. The Center helps in making a break-through from the traditional concept, attitude and habit for innovative understanding.
2. It serves as a supporting system to local initiative and provides effective leadership in educational reform.
3. It assists educators and community leaders be more responsive to societal concerns.
4. It helps in harnessing the talents and skills of professional and paraprofessional personnel in contributing towards the attainment of the educational goals.
5. It helps in providing appropriate administrative structure and devices to the schools for initiating, carrying on, controlling and evaluating the long term educational program.
6. It serves as a clearing house for various educational information among schools and awrajas within and without the administrative region.
7. It is instrumental in promoting the concept of self-reliance.

Thus, these Pedagogical Centers have been established with the major aim of providing professional assistance to teachers and educational leaders to minimize their problems, build confidence and develop positive attitudes towards their profession so that they could be able to meet their responsibilities effectively in improving quality education. It had also aimed at mobilizing the support of the public towards the attainment of the educational goals (Ministry

of Education, 1980:6). Specific tasks were, therefore, identified to be accomplished by the Pedagogical Centers. According to the Ministry of Education (1980:16-30) , the functions include coordination, preparation of instructional materials, conducting research activity, providing training and developing appropriate technology.

However, through evaluating the activities of the Pedagogical Centers, one of the functions (i.e. developing appropriate technology) had been reduced because it does not have direct relevance to the teaching-learning activity (Ministry of Education, 1988; Amhara Regional Education Bureau, 1994).

To begin the program of the Pedagogical Centers, the Ministry of Education had allocated a fund of Birr 333,000, at the rate of Birr 3000 for each Awraja and Birr 1000 for each regional capital (The 1977-1981 Progress Report of the Awraja Pedagogical Centers, 1982:2). In addition, a total of about Birr 4.6 million was collected from the government of the Country, community, European Economic Commission (EEC), United Nation International Children's Emergency Fund (UNICEF), United Nation Education, Science and Culture Organization (UNESCO), World Bank and African Development Bank to run the functions of the Pedagogical Centers (Amare and Tassew, 1996:16).

According to the progress report of the Awraja Pedagogical Centers 1977-1981 (1982:17), numerous orientation courses, seminars, workshops and study visits for teachers, educational leaders and community participants had been organized to create awareness about the objectives and functions of the Awraja Pedagogical Center. In addition of this, further effort was made to popularize the programs of the Pedagogical Centers internationally through international seminars, workshops and conferences. As a result, educators from Africa became

interested and had expressed their wish to come to Ethiopia and study the Awraja Pedagogical Centers' program by sending delegates from many countries including African Curriculum Organization (ACO), African Social Studies Program (ASSP) and Science Education Program for Africa (SEPA) (Ministry of Education, 1988:44).

2.6. The Establishment of School Pedagogical Centers and Their Functions

Like any nation, it is the desire of the government of Ethiopia in establishing various institutions, and expanding different educational programs to provide its citizens with quality of education with its available resources. However, improving the standard of education and quality of the teaching-learning process cannot be achieved without an effective improvement of school facilities and provision of better instructional materials. It was with this belief that the Ministry of Education strongly has supported the establishment of School Pedagogical Centers in all schools of the Nation.

According to the 1977-1981 progressive report of the Awraja Pedagogical Centers (1982:38), the ultimate aim of establishing these Pedagogical Centers was to bring their services at school level for facilitating the teaching-learning activity. The School Pedagogical Centers were established to fulfill certain objectives. The objectives of the School Pedagogical Centers are: to promote the crisscross of ideas and materials; to foster the development of learning from one another; to encourage those who have the ability and know-how to come forth and demonstrate their skills and talents; to recognize and appreciate the efforts of those who try their best to contribute to the growth and development of their profession; and to induce professionals to engage in creative, innovative and productive work and to give them the necessary support that would facilitate their work (Ministry of Education, 1982:32).

To expand and strengthen the service of School Pedagogical Centers in schools, the Ministry of Education had started a pilot project of 32 schools of 12 Awrajas in four administrative regions. The central aim of the study was to investigate the result of making School Pedagogical Centers as focal points for the integration, coordination and systematic operation of all educational inputs in a school system for the purpose of carrying out effective classroom instruction. The pilot study had focused on the major inputs of the schools: administration, school management committee, department organization of teachers, students organization in different clubs and school compound (Ministry of Education, 1982: 39-44).

For conducting the project effectively, the Ministry of Education had provided funds for these experimental School Pedagogical Centers. It has also organized seminars and study visits for the staff of the School Pedagogical Centers. Then, to expand the establishment process of the Pedagogical Centers in all schools of the Country, the Ministry of Education had allocated substantial amount of money to train School Pedagogical Centers' coordinators. During the period of 1979-1980, 4680 coordinators of School Pedagogical Centers had been given orientation on the objectives and functions of both School and Awraja Pedagogical Centers (Ministry of Education, 1982:33).

According to the Ministry of Education (1988:33), the main aim of establishing the School Pedagogical Centers was to facilitate the exchange of knowledge, skills, experiences, materials and resource persons between School Pedagogical Centers and Awraja Pedagogical Centers as well as among the schools in the Awraja. They are also used to encourage and stimulate active involvement of teachers, students and the community in generating new ideas and innovations to enrich the curriculum and improve the quality of education.

The need for establishing School Pedagogical Centers with the main functions: encouraging teachers and students to prepare instructional materials; organizing orientation programs; conducting research and evaluation; enriching the National Curriculum and local curriculum development is , therefore, of great importance for improving the quality of education (Ministry of Education, 1988).

~~These functions of School Pedagogical Centers attest to the fact that they are change agents in~~ the education system. Accordingly, School Pedagogical Centers can be used as centers where beneficiaries of the educational system get together to discuss common educational problems and seek possible solutions. They are also used as research and innovation centers for teachers and students. In the same way, they are centers for pooling the knowledge, experiences, skills, talents of teachers and students and community resources for improving the quality of education (Ministry of Education, 1988:40).

In general, the responsibility of School Pedagogical Centers has to gear towards changing the school activities to achieve the over all educational goals. They must address themselves to the problems and felt needs of the teaching-learning process.

In whatever educational level, according to Birara (1988:38-39), the establishment of School Pedagogical Centers renders a fertile ground for the preparation of instructional materials. It also gives a way for introducing recent development and new techniques. Workshops, seminars and short term training can be conducted in a School Pedagogical Center. They also coordinate the activity of various popular organizations, development agencies, government institutions with the school activities.

However, more realistically, School Pedagogical Centers have not been effective enough in their activities to succeed in the realization of the major objectives set for them. This was because due to constraints highlighted in different survey studies. For instance, in a survey study made by one Addis Ababa University student in some senior high schools of North Shoa, as cited by Amare and Tassew (1996:22), showed that the School Pedagogical Centers did not achieve their objectives for which they were established. According to this study, the problem of having too ambitious objectives was the most serious reason for the failure of School Pedagogical Centers to attain their objectives. Almost all the respondents in the study responded in the negative for the question asked whether or not the School Pedagogical Centers objectives were attained.

Amare and Tassew (1996:21) added that the stated objectives of School Pedagogical Centers were vague, general and not well focused on the purposes of producing and disseminating educational technology (instructional materials). According to them, these objectives rather appeared to reflect activities as wide as education itself. Thus, it is really questionable to say that these Centers have properly achieved their objectives and functions.

A resource center needs the services of specialists for arranging systematic integration of various experiences (Sampath et al, 1984:70). According to these writers, the coordinator of a resource center (or instructional materials center) is the one who activates the resource center in a school. His duties include: assisting all teachers in the school in audio visualizing their classroom instruction; arranging in-service workshop; keeping an inventory of community resources; maintaining a library of audio-visual educational materials; assisting teachers in planning, developing, selecting, using and evaluating instructional materials for their classroom

teaching; organizing good stock of audio- visual equipment and maintain in good condition; and being sensitive to all new development in the field of instructional technology (Sampath et al, 1984:70).

Similarly, in the Ethiopian situation, the activities of School Pedagogical Centers are run by competent teachers selected from among the staff of the school. These coordinators are given lighter teaching load so that they can concentrate on coordinating the activities of teachers and students as well as the community towards the steady development of the School Pedagogical Centers (Ministry of Education, 1988:33).

In order the School Pedagogical Centers to function as expected, the coordinators are primary responsible persons to coordinate all activities in the Pedagogical Centers. For effective work performance, these personnel are required to accomplish which mainly include: supporting teachers and students in the preparation of instructional materials; helping students to produce materials useful for the community; preparing instructional materials based on the instructional content; collecting other materials from different organizations, training institutions, etc. (Ministry of Education, 1982).

To accomplish their activities in the School Pedagogical Centers effectively, according to the Ministry of Education (1980:46), the coordinators of the Centers were given short courses that help them to familiarize with the objectives and functions of both Awraja and School Pedagogical Centers. They were oriented on how to prepare instructional materials from locally available objects or resources with basic tools available in the Centers.

However, though the purpose of establishing School Pedagogical Centers was sound enough, a Survey Study of Pedagogical Centers in Primary Schools of Addis Ababa, conducted by Amare and Tassew (1996:28) ,. has indicated that the services that are originally expected from School Pedagogical Centers such as promotion of innovation, facilitating peer discussion on problems of teaching, training on methodology of teaching and initiating action research have been least attended by the Pedagogical Centers. Similarly a survey study made by Addis Ababa University student, as cited by Amare and Tassew (1996:22) has found that School Pedagogical Centers did not give training and experiences; did not organize seminars or workshops for both teachers and students; did not participate in the in-service training of teachers. They rather focused on preparing of instructional materials from locally available materials.

The idea of educational improvement can occur through a change in teachers (Adams, 1975:167). According to Selden and Barland, cited in Adams (1975:167), good curricula, creative instructional materials, efficient organization and management, modern facilities and equipment contribute to the quality of education, but for their full realization all these depend upon the skill and commitment of teachers. This indicates that improving the competencies, skills, teaching strategies and styles of individual teachers through seminars workshops, in-service training programs is seen as a very important mechanism for improving quality of education.

2.7. Preparation and Utilization of Instructional Materials in Pedagogical Center

As it is stated in the preceding pages, instructional materials are media that are used to reinforce and facilitate a classroom instruction in particular, and finally this leads to the quality of education in general. Instructional materials enable a learner to visualize, estimate as well as grasp new concepts more clearly with the highest degree of interest. That is, they help in motivating the interest of the learner. Instructional materials are also used to increase the participation of the individual learners in the learning process, and give the opportunity to study the lesson in depth. They also assist a teacher in attaining his/her specific objectives of a classroom teaching.

According to Romiszowski (1981), instructional materials that can be used for instructional purpose can be simple devices that can be produced locally from local materials, or high technological equipment found in countries whose educational systems are rather more technological in nature. When there is no access to complex and sophisticated materials, the alternative way is to rely on locally produced, simple and inexpensive materials. These simple and easily accessible group of instructional materials include drawings, diagrams, charts, tables, graphs, maps, real objects, etc., and they are categorized under graphic and real media (Locatis and Atkinson, 1994).

Instructional materials can be obtained from several sources. As Brown and others (1983) have identified some of the sources are: schools, the school system, the community and sources outside the community. According to these writers, there can be different instructional materials in the school available for a classroom instruction. The right location of the materials in a school is the resource center or Pedagogical Center (as Ethiopian Context). The school

can buy them from commercial organizations or from educational institutions, or may freely be given from other educational centers. In some cases, the Central, Regional or Zonal educational offices may be consulted for catalogs or materials. In addition, workers, businessmen, experts of various activities, public libraries, museums and institutions in the community can be rich resources of instructional materials. There can be a provision of materials for a school resource center from various groups outside the community such as state, country agencies, foreign government, non-governmental agencies, etc.

When the instructional materials are inadequate or unsatisfactory to employ in the instructional process, they can be prepared in the School Pedagogical Centers from locally available materials. According to Wittich and Schuller (1973), production of instructional materials is properly a team work involving specialists, teachers and students. This group of individuals can produce a far superior product than an individual teacher because of the shared effort and expertise. This does not mean, however, that teacher involvement in the production process has a minimal effect. For the fact that teachers have a recognized amount of exposure to classroom situations, their contribution for instructional materials preparation is very important (Wittich and Schuller, 1973).

Before deciding to prepare instructional materials in Pedagogical Centers, certain prerequisites should be taken into consideration. One must determine whether there is enough time, trained personnel and financial support in order to produce instructional materials. Administrative support for local production facilities are both educationally and financially accepted (Wittich and Shuler, 1973). Once the resources to prepare instructional materials are available, then before beginning production, instructional objectives, contents and methods of teaching and

learning should be identified. In addition, the needs and interests of learners who participate in the respective educational level need to be pre-assessed (Brown et al, 1983:79).

In developing instructional process, the teacher selects instructional materials that are most appropriate to enhance students' learning. The selection of instructional materials, according to Ellington (1993), should be based on the content of the lesson to be taught, the method to be used during a classroom instruction. In selecting and using instructional materials for a classroom instruction, the teacher must decide exactly what the students are to learn and then use the most appropriate types of instructional materials for the classroom teaching-learning activity (Bullough, 1978).

According to Brown and others (1983:75), selection of instructional materials is based on some principles which guide the teacher. The general principles identified by Brown and others are as follows:-

- No one instructional material is best for learning.
- Uses of instructional materials should be consistent with the instructional objectives.
- Know the instructional materials to adapt them in specific program.
- Select the instructional materials for their appropriateness for use in the method selected.
- Don't use your own preference in the ways of choosing or using particular instructional materials.
- Be aware that some excellent instructional materials may become useless if used in poor instructional environment.
- Realize students experiences, preference, individual interests and capabilities, and learning styles that may influence result of instructional materials use.

- Keep in mind that resources and learning experiences are not necessarily good or bad simply because they are concrete or abstract.

The teacher should accomplish the task of selecting the relevant instructional materials in collaboration with the School Pedagogical Center coordinator and students. Apart from preparing instructional materials in a School Pedagogical Center, a committed teacher encourages students to participate in the preparation and selection of instructional materials.

Involving students in instructional materials preparation and selection has instructional value since they get benefit from their experiences. They can also come up with new ideas and add up creative talents while participating in preparation and selection of instructional materials. Learning becomes more effective and long-lasting when students take part in the preparation process of instructional materials (Brown et al, 1983:79). In line with this point, Sive (1983) has said that learners' involvement becomes maximum when the learners themselves prepare instructional materials. However, when the teacher encourages students in preparing materials they should be helped to work in their own pace. In addition, it should be clear that the communicative effect of students' effort is to see the final product after a process of several trials and errors. Students involvement in the preparation and selection of instructional materials should be considered as part of learning and must not be seen as periphery (Brown et al, 1983:79).

The attitude of the people in the educational system has an impact on the preparation and utilization of instructional materials. For instance, an individual with a negative attitude towards the preparation and utilization of instructional materials will not be in a position to

prepare and use appropriate instructional materials that could facilitate his/her teaching or learning.

These days, however, the diffusion and development of the concept of instructional media, especially in developed countries, the attitude of people and education itself are changing. Nevertheless, in developing countries such as Ethiopia, the attitude of people which is resulted from age-long tradition of using lecture method within teacher-centered classroom instruction has a great impact on the preparation and use of interactive instructional materials for instructional purpose (Demissew 1991:34). In support of this experience, the results of the survey studies made on Pedagogical Centers reported by Amare and Tassew (1996) and Amare (1999) have showed that teachers did not participate in School Pedagogical Centers in preparing and using instructional materials for their classroom teaching.

Reasons for the reluctance of a teacher in preparing and using instructional materials for his/her classroom teaching have been stated by Birrara (1988:32-33) as follows:

- Preparation of instructional materials takes time, energy and money. An easy way out with minimum effort is to take or write words.
- Lack of awareness of the use of media in the communication interaction is another factor that interferes multimedia approaches. This arises from the deficiency of training programs which gives less emphasis to the preparation and utilization of instructional materials.
- In availability of instructional materials in the School Pedagogical Centers is common but lame excuse many teachers raise as reason for reluctance. Some may not be available but not at all simple teaching materials can be prepared from locally available materials.

In this connection, Amare (1995_a:5) , referring to the different studies made on Pedagogical Centers by Addis Ababa University students, has stated that many schools have shortage of instructional materials. On the other hand, some schools have minimal problems in instructional materials accessibility. In these schools the state of teachers' instructional material preparation and utilization, according to Amare, has been categorized into the following basic units:

1. Most teachers don't utilize instructional materials that are available in the respective School Pedagogical Centers.
2. Teachers in schools with instructional materials scarcity are observed using instructional materials prepared by themselves (P.5-6)

To minimize the impact of such a tradition and bring about a relatively progressive view of preparation and utilization of instructional materials in the system, Amare (1995a: 6-7) has suggested five basic issues:

1. Instructional materials must be considered as an integral part of the curriculum.
2. Instructional materials and the respective methods must be incorporated into teacher's guides.
3. The scientific aspect of teaching methods must be given due attention and properly characterize the personality of the student-teachers.
4. Teacher training colleges and institutes must show and actualize the accompanied changes to instructional materials preparation and utilization
5. Sources for educational information must not be restricted to merely textbooks and teachers.

A strategy to train teachers to develop the culture of using different interactive and democratic methodologies that could enable them to use different instructional materials has been indicated in the existing educational policy of the Country. However, to realize such an objective, the use of totally participatory methods by teacher trainers must be considered of very important (Amare, 1995a). By observing the practical experiences of Addis Ababa University, Amare has also indicated that it is not only degree of availability but the kind of tradition in which the trainers have gone through which mainly influenced the nature and degree of instructional materials use in the teaching-learning process.

As a whole, the diffusion of instructional materials preparation and utilization culture into the education system is hampered by shortage of instructional materials in schools, shortage of trained manpower in instructional materials preparation and utilization practice, and the influence of the age-long tradition which has been predominantly using the lecture methods (Evaluative Research of the General Education System in Ethiopia (ERGESE), 1986; Amare, 1995a).

However, the current widespread recognition of the need for locally produced instructional materials has encouraged the development of instructional materials centers in individual schools, school districts or regional center. Such a center may offer a number of professional and technical services for teachers and students (Brown et al. 1983:79)

CHAPTER III

3. RESEARCH DESIGN AND METHODOLOGY

3.1. Sources of Data

The study focuses on assessing the effect of Pedagogical Centers on implementing the new curriculum, with particular reference to First Cycle Primary School Education. This educational level in the current Ethiopian education system is considered as a focal point due to the fact that the New Education and Training Policy is being practiced at a large scale in this level.

To accomplish the above purpose of the study, relevant literature review was made. In addition, primary data was collected from related area personnel (i.e. from Woreda educational experts) and sample First Cycle Primary School Principals, teachers and School Pedagogical Centers' coordinators in the Amhara Region. Apart from the above sources of data, educational experts from the Region Education Bureau, the sample Zone Education Departments, the Institute of Curriculum Development and Research (ICDR) and Educational Mass Media Agency (EMA) were interviewed. Another important source of data used was observing the physical condition of the sample School Pedagogical Centers and availability of instructional materials produced by the Pedagogical Centers themselves for teaching different subjects.

3.2. Sampling Procedures

As it is stated in the scope of the study, there are 11 administrative zones in Amhara Region, with a total of 105 Woredas. To assess the effect of Pedagogical Centers on the First Cycle Primary Schools in implementing the new curriculum in all First Cycle Primary Schools of the Region is both time-consuming and tedious. This forced the researcher to conduct the study on limited Zones, Woredas and schools. In light of this, four zones (36.4%) were selected using stratified sampling technique. From the sample administrative zone that were identified eight sample Woredas were selected using the same technique, two Woredas from each sample Zone.

After the number of Woredas to be taken from each zone was determined, then, purposive sampling procedure was applied to First Cycle Primary Schools in each Woreda to select sample schools. Accordingly, 24 schools, three schools from each Woreda, were selected for the study. Consequently, 154 teachers, all teachers in each sample school were included using availability sampling to fill the questionnaire. This is because as per the guideline of the Ministry of Education self-contained classroom set up (two teachers for a classroom) is being practiced at the First Cycle Primary Schools of the Region. Therefore, all self-contained classroom teachers of the sample schools were included in the study.

The second group of the respondents consists of educational experts from Woreda Education Offices. A total of 32 experts from the sample Woreda Education Offices were selected using purposive sampling. That is experts assigned at the relevant positions who are directly responsible for facilitating the teaching-learning activities in general, and for supporting School

Pedagogical Centers in particular were included in the study. Hence, the findings of the survey are based on the information obtained from the sources depicted in Table 1.

Table 1: Distribution of the Respondents

Respondents	Zones				Total
	South Gondar	West Gojjam	Awi	East Gojjam	
Woreda education experts	8	8	8	8	32
School principals	6	6	6	6	24
Teachers	48	36	39	31	154
School Pedagogical Centers' coordinators	6	6	6	6	24
Total	68	56	59	51	234

3.3. Instruments of Data Collection

In order to secure pertinent information for this study, a questionnaire was developed as the main instrument for collecting the needed data. The questionnaire is composed of four parts. The first part was designed to obtain background information about the respondents. The second part was designed to secure relevant information regarding the availability of instructional materials and equipment in School Pedagogical Centers, the participation of teachers in producing and utilizing instructional materials for their teaching activity, the attitude and participation of higher management officials, community and other organizations outside the system in supporting Pedagogical Centers. The third part of the questionnaire

contains the type of Pedagogical Centers' activities and their degree of performance. The last part was designed to identify the major problems of School Pedagogical Centers.

The questionnaire was prepared in Amharic in order to make the respondents feel more comfortable in responding to the items genuinely. The items were prepared in a structured form in which both close-ended and open-ended items were included. The questionnaire contained mainly close-ended items but with some open-ended items included.

Apart from the data obtained from the questionnaire, an interview was employed as an instrument for collecting pertinent information for this study. The interview was conducted with educational experts from the Institute of Curriculum Development and Research, Educational Mass Media Agency, Amhara Regional Education Bureau and the sample Zone Education Departments on how they perceive the contribution of Pedagogical Centers in implementing the curriculum. It was presented in an unstructured form to enable the interviewees express what they feel and think without inhibition. Besides this, informal conversation was conducted with school principals, School Pedagogical Centers' coordinators and teachers. All interviews were conducted by the researcher of this study.

Document analysis was another instrument of data collection. The New Educational and Training Policy, the Strategy document, Education Statistic Annual Abstracts were analyzed.

The data that was collected through questionnaire and interview were supplemented by personal observation of School Pedagogical Centers. Pertinent information for certain kinds of the research questions could be secured by observing how the Pedagogical Centers are

organized and how things look like in the Centers. The Schools Pedagogical Centers were also observed by the researcher himself using a checklist.

3.4. Pretest of the Instruments

To ensure the reliability of the instruments, a pilot study was carried out in two Woreda Education Offices and two primary schools prior to the main research work. The selection was arbitrary as the purpose at this stage was to confirm the applicability of the instruments and to know the existing state of potential respondents with respect to the problem under study. This step was also considered necessary for the researcher to verify or modify his research instruments which had already been developed based on the basic research questions and the Literature Review.

It was also given to experts who work in the Amhara Region Education Bureau and one Zone Education Department for comments on the items in terms of the purpose of the study. Most of the questions were found to be pertinent to the purpose of this study, except for some minor modifications.

3.5. Strategies of Data Analysis

Some sort of information that enable a researcher draw some meaningful conclusions about the sample he/she is studying can be collected in several ways, but it can be reported in only two ways, through numbers or through words (Fraenkel and Wallen, 1993:157).

Based on the above notion, the Descriptive Survey method was employed to conduct this study. This is because Descriptive statistic method serves as a tool for describing or summarizing or reducing the properties of unmanageable data to manageable form. It involves tabulating, describing and ordering of data collected through questionnaire , interview and observation (Glass and Hopkins, 1984:2).

The data collected through questionnaire were tallied, tabulated, and the frequency counts were changed into percentage for analyzing the data. With the other instruments, interview and observation, the information obtained were reported through narrative description as richly as possible.

Finally, a summary of the findings, conclusions and recommendations were made based on the systematized information obtained using the above instruments of data gathering.

CHAPTER IV

4. PRESENTATION, ANALYSIS AND DISCUSSION ON THE FINDINGS

This chapter is assumed to be the main part of the study which presents the analysis of the findings. The data collected through questionnaire are organized in tabular form and interpreted using percentage. The information gather through interview and observation are also qualitatively described in words to give response for the basic research questions set in this study.

4.1. Analysis of Data and Discussion of the Findings.

Table 2: Number and Percentage of Returns on Questionnaires.

Respondents	Sent	Returned	Usable Returns	
			N ^o	%
Woreda Education Experts	32	19	19	59
School Principals	24	19	19	79
Teachers	154	144	144	88
School Pedagogical Center Coordinators	24	21	21	88
Total	234	203	203	

Due to various reasons 41 (17 percent) questionnaires were not returned. The remaining 203 (83 percent) properly completed copies of the questionnaire were included in the final computation of the data.

4.1.1 The Respondents' Characteristics

Description of the characteristics of the respondents gives some basic information about the sample population involved in the study. Table 3 indicates the characteristics of the respondents of the study.

Table 3: Characteristics of the Respondents of the Study

Variables	Characteristics Categories	Woreda Education Experts		School Principals		Teachers		School pedagogical Center Coordinators	
		N ^o	%	N ^o	%	N ^o	%	N ^o	%
Sex	Male	19	100	18	94.7	63	43.7	18	85.7
	Female	-	-	1	5.2	81	56.2	3	14.2
Work Experience	1-5	-	-	-	-	8	5.5	--	-
	6-10	-	-	1	5.2	9	6.2	3	14.2
	11-15	4	21	2	10.5	23	15.9	3	14.2
	16-20	8	42.1	11	57.8	65	45.1	11	52.3
	21-25	5	26.3	4	21	37	25.6	3	14.2
	Over 25 Years	2	10.5	1	5.2	2	1.3	1	4.7
Qualification	10+2	2	10.5	-	-	-	-	1	4.7
	11+1	1	5.2	-	-	-	-	-	-
	12 th Complete	-	-	-	-	1	0.6	2	9.5
	12 th Complete and Short term training	-	-	1	5.2	8	5.5	1	4.7
	12+TTI	9	47.3	18	94.7	135	93.7	16	76.1
	12+1	1	5.2	-	-	-	-	-	-
	12+2	6	31.5	-	-	-	-	1	4.7
Age range	Below 20 years	-	-	-	-	-	-	-	-
	20-24 "	-	-	-	-	3	2	-	-
	25-29 "	-	-	1	5.2	20	13.8	3	14.2
	30-34 "	3	15.7	3	15.7	30	20.8	5	23.8
	35-39 "	7	36.8	8	42.1	64	44.4	10	47.6
	40 and above years	9	47.3	7	36.8	27	18.7	3	14.2

Note: TTI;- Teacher Training Institute

As it can be seen from Table 3, all Woreda education experts are males in the sample Woredas where the data were obtained. Out of the total number of teachers, principal and School Pedagogical Centers' coordinator respondents, 94.7 percent, 43.7 percent and 85.7 percent of

the school principals, teachers and School Pedagogical Centers' coordinators were registered males respectively. On the other hand, 5.2 percent, 56.2 percent and 14.2 percent of the principals, teachers and School Pedagogical Centers' coordinators found to be females respectively. Here it may be a great surprise to those who may happen to read this paper because there is not a single female expert in the sample Woreda Education Offices where these data were secured. As one read from Table 3, females participated more in teaching than in managerial positions. This low female participation in managerial area seems to emanate from the cultural contexts that are commonly discriminated, especially, in developing countries like Ethiopia.

The majority of Woreda education experts, school principals, teachers and School Pedagogical Centers' coordinators had work experiences that range between 16 to 20 years. Most of the respondents of the four groups, that is, 144 (70.9 percent) of persons had work experiences that range between 16 to 25 years. This indicates that most of the respondents of this study were more experienced people.

Regarding the qualification of the respondents, 7 (36.8 percent of the Woreda education experts have 12+1 and 12+2 level of qualification whereas experts with 10+2 , 11+1and 12+TTI levels of qualification accounted for 12 (63.1percent) , while 94.7 percent of the school principals, 93.7 percent of the teachers and 76.1 percent of the School Pedagogical Centers' coordinators were 12+TTI level of qualification.

Out of the total number of the respondents of the school principals, teachers and School Pedagogical Centers' coordinators 169(91.8 percent) had the needed qualification (12 + TTI) as it has been indicated in the Education and Training Policy document (1994). From the total

number of the School Pedagogical Centers' coordinators, the majority, 76.1 percent were TTI graduates. However, none of them had training in educational communication/media.

Besides, looking into age aspects of the respondents of this study, 42.1 percent of school principals, 44.4 percent of the teachers and 47.6 percent of the School Pedagogical Centers' coordinators were between 35 and 39 years of age, while 47.3 percent of the woreda education experts were 40 and above years of age.

From this data, one can make a meaningful assumption that most of the four groups of the respondents of the study are more experienced. The most salient point observable from the above data analysis is that the majority of the school principals, teachers and School Pedagogical Centers' coordinators were active working force which is advantageous to primary school students in many respects.

4.1.2. Availability of Instructional Materials in the School Pedagogical Centers.

The educational practice in the Ethiopian schools has been still strongly dominated with more of teacher-centered classroom method of teaching (Amare, 1995_a). In this kind of classroom situation, it seems unacceptable to assume that instructional materials can play the expected role in education. If rarely used in classroom instruction, it means that they are considered secondary to the print media and teacher talk in the classroom (Wittich and Schuller, 1973).

Production of instructional materials and informing the users about them cannot be sufficient condition for proper classroom instruction. Rather they must be readily available. That is, if

the instructional materials are considered indispensable to the teaching-learning activity, then they should be on hand in all schools. In line with point, Tucker, as cited by Solomon (1999), has pointed out that if instructional materials are included as integral elements of the curriculum and available in schools, then there is a chance to ensure that all learners following that course have ready access to these materials. Thus, the extent to which instructional materials are available for teachers and students is one of the important factors in improving quality of education in general, and a classroom instruction in particular.

The state of availability of instructional materials in the Ethiopian context has been surveyed. The survey depicted that the Ethiopian education system has failed for the fact that there is a great scarcity of instructional materials which negatively affects the quality of education. For instance, Amare (1998) has identified that unavailability of instructional materials was the most serious problem in Ethiopian schools.

Being aware of this, the New Education and Training Policy (1994) believes in encouraging the availability of instructional materials in the existing education practice of Ethiopia. In the policy it is indicated that emphasis ought to be given for instructional material utilization in a classroom instruction.

Although attempts have been made to incorporate the issue of instructional materials availability and utilization at the policy level, investigating its implementation becomes

necessary. As a result, the responses regarding the availability of instructional materials in the School Pedagogical Centers are reported in Table 4.

Table 4: Availability of Instructional Materials in the School Pedagogical Centers

(N^u = 203)

Respondents	Adequate		Not adequate		None at all	
	N ^u	%	N ^u	%	N ^u	%
Woreda education experts	-	-	19	100	-	-
School Principals	1	5.2	17	94.7	1	5.2
Teachers	12	8.3	131	90.9	1	0.6
School Pedagogical Center Coordinators	2	9.5	18	85.7	1	4.7

Table 4 presents information regarding the degree to which the School Pedagogical Centers collected instructional materials relevant to the implementation of the First Cycle Primary School Curriculum.

As indicated in Table 4, the majority of the four groups of the respondents, i.e. 185 (91.1 percent) responded that instructional materials in the School Pedagogical Centers were inadequate. Only a few respondents, that is, 15 (7.3 percent), indicated that the School Pedagogical Centers contained adequate instructional materials.

During the observation of the sample School Pedagogical Centers, the researcher of this study did not find adequate and well prepared instructional materials for each subject and each grade

levels to enrich the new curriculum being implemented at the First Cycle Primary Schools. In one of the sample schools, Sebatamit Primary School, in Bahir Dar Zuria Woreda (West Gojjam Zone), instructional materials were not prepared and made available in the School Pedagogical Center to teach and learn the new curriculum.

From the foregoing finding, one can easily understand that sufficient instructional materials were not available in the School Pedagogical Centers of the sample schools. In most of the schools that this study was conducted, there has not been tradition of obtaining instructional materials from different sources for a classroom instruction. In this respect, it is clearly understood that teachers were forced to use the traditional way of teaching-learning methodology-- chalk and talk, in their classroom teaching. From the information obtained, it is possible to say that the efforts made to prepare and use instructional materials in the teaching-learning activity seem to have been declining and discouraging. In other words, due to the unavailability of instructional materials and use of traditional way of teaching method, the necessary knowledge, attitude and skills that students could have gained might remain remote.

Regarding the physical appearance and conditions of the rooms used as Pedagogical Centers, all of the sample schools of this study had no rooms constructed for the purpose of Pedagogical Center activities. It has been observed that staff rooms in seven schools and classrooms in 17 schools were being used as School Pedagogical Centers. All the sample School Pedagogical Centers had only one room used for preparing instructional materials, displaying, storing as well as office work purposes.

In the nine sample School Pedagogical Centers, it had been observed that the available instructional materials were organized by subjects/departments. On the other hand, in the rest

of the School Pedagogical Centers, instructional materials were stored in messed-up manner. The majority of the respondents of the study, i.e., 191 (94 Percent) said that most of the instructional materials, if not all, in all the School Pedagogical Centers were prepared by the Pedagogical Centers themselves, except for electronic devices. This was also confirmed during the observation of the Centers.

The type of instructional materials available in the sample School Pedagogical Centers were counted by the researcher of the study. Table 5 depicts a general picture of the type of instructional materials available for each subject area in the sample School Pedagogical Centers.

Table 5: Types of Instructional Materials Available in the School Pedagogical Centers.

Categories of Instructional Materials	Quantity (Roughly Counted)											
	Amharic		English		Mathematics		Environmental Science		Aesthetic		Total	
	N ^o	%	N ^o	%	N ^o	%	N ^o	%	N ^o	%	N ^o	%
Graphics	787	99.7	1167	96.6	387	85	228	70.8	65	23.9	2634	86.8
Models	2	0.2	4	0.3	48	10.5	83	25.7	42	15.4	179	5.8
Objects	-		-		20	4.3	11	3.4	164	60.5	195	6.4
Radio	-		-		-		-		-		17	0.5
Tape Recorder	-		-		-		-		-		9	0.2

The intent of Table 5 is to enlist the quantity of instructional materials available in the School Pedagogical Centers in terms of their categories and subject areas. Table 5 depicts the majority of the instructional materials available in the Pedagogical Centers (86.8 Percent) were graphics: maps, diagrams, pictures, flash cards, etc., which are simple as well as do not need costly materials to prepare and accessible. On the other hand, electronic devices: radio and tape recorder, shared only 0.7 percent out of the total roughly counted instructional materials

in the sample Pedagogical Centers. Most of the radios and tape recorders were donated by donors /NGOs.

Of all the total instructional materials (3034) available in the sample School Pedagogical Centers, the language areas— Amharic and English, had the greatest share 1960(64.6 percent). Aesthetic subjects had the lowest, only 271 (8.9 percent) of the instructional materials related to Aesthetic subjects.

From Table 5, therefore, it could be concluded that almost all (99 percent) of the instructional materials counted in the School Pedagogical Centers' were dominated by the materials prepared and gathered from locally available materials. The instructional materials that can be used for instructional purpose could be simple devices or high technological equipment. When there is no access to complex and sophisticated materials, the alternative way is to rely on locally prepared, simple and inexpensive materials that can stimulate some of the sense of the learner if possible.

It was reported by the majority of the respondents 92.1 percent of this study in Table 4 that the sample School Pedagogical Centers' were equipped with inadequate instructional materials. The respondents of the study were asked to identify the major reasons for the shortage of instructional materials in the School Pedagogical Centers. Those who responded negatively 188 (92.6 percent) gave six reasons. These were:-

- lack of adequate training on preparation and utilizations of instructional materials (43.8 percent).
- shortage of budget (36.1 percent)

- shortage of time or high teaching load (10.6 percent)
- shortage of equipment for preparing instructional materials in the School Pedagogical Centers (5.3 percent)
- lack of teachers' interest towards the Pedagogical Center (3.7 percent).
- shortage of locally available materials (0.5 percent)

The problem of lack of adequate training on preparation and utilization of instructional materials was the most serious reason identified by the teachers and the school principals. The School Pedagogical Centers' coordinators and Woreda education experts said that shortage of budget was the most limiting factor causing the scarcity of instructional materials in the Pedagogical Centers.

Among the six reasons, the most frequently mentioned by the majority of respondents was considered to have been the most serious reason for the shortage of instructional materials in the School Pedagogical Centers. In the same manner, shortage of adequate budget was also considered to have been the second major cause for the scarcity of instructional materials in the Pedagogical Centers. Shortage of time—high teaching-load, was considered to have been the third reason.

In order to see how much training on instructional materials preparation and use was provided by the Regional Education Bureau, attempts were made to gather some statistical data from the Region. Moreover, an interview was held with the Pedagogical Center coordinator in the Educational Research Team of the Regional Education Bureau to get such type of information

In the Ethiopian educational system, the Regions are mainly responsible for the quality and relevance or responsiveness of nation-nationalities needs and student background of the implemented curriculum in the system. As a result, providing orientations in the form of seminars and workshops to the lower responsible bodies and adopting units is of paramount importance for the Regional Education Bureaux.

Though the statistical data of personnel trained at different levels on the preparation and utilization of instructional materials and other related issues of Pedagogical Centers was not available due to lack of a systematic record keeping or documentation, it was explained during the interview that the Regional Education Bureau had provided orientations on certain aspects of Pedagogical Center by its experts at different times for the Zone Pedagogical Centers' coordinators, selected Woreda Pedagogical Centers' coordinators and for a very few school Pedagogical Centers' coordinators selected from the schools which had shown better performance in their Pedagogical Center activities

According to the Pedagogical Center coordinator of Regional Education Bureau, the orientations that were given by the Regional Education Bureau include preparation and utilization of instructional materials, fundamentals of research activity, curriculum evaluation, and how to plan the activities of Pedagogical Centers. In addition to this, different manuals were prepared and distributed to the Zone Education Departments and Woreda Education Offices. But both the orientations and documents did not reach the school level. Those who have participated in the orientation program at the Regional level were expected to multiply the skills they acquired to the users in their respective schools

Although such type of orientations had been organized by the Regional Education Bureau, said the coordinator, they were not considered satisfactory. There was no follow-up mechanism for experts of both the Regional Education Bureau and Zone Education Departments whether or not those who had got the orientations multiply their skills. The main reason was shortage of budget at all levels-- Region, Zone, Woreda and school.

Till 1990 (E.C.), budget was allocated for the Zone Education Departments from the Regional Education Bureau to activate the functions of Pedagogical Centers. However, since the Zones and Woredas have been given the right to allocate their own budget both at Zonal and Woreda levels, the financial support that was provided by the Regional Education Bureau had ceased after 1990 (E.C.). The Zones and Woredas had to allocate their recurrent budget for the Pedagogical Centers by making agreement with their respective Zone and Woreda Councils. But as have been seen from experience, due consideration was not given by the Zones and Woredas.

On the other hand, in West Gojjam- one of the zones of Amhara National Regional State, attention seems to have been given to school buildings and students enrollment than to training of personnel and teachers in preparation and utilization of instructional materials. The Pedagogical Center coordinators of the Zone Education Department underlined that shortage of budget, lack of training and time shortage were the main problems that hindered the functions of Pedagogical Centers at school level. He further said that though there are Pedagogical Center coordinators at the Regional, Zonal and Woreda as well as school levels, they have little or no needed expertise to facilitate the activities of the Centers. According to the resource person, the main problem observed along the structure is the inexistence of

- School Pedagogical Centers' coordinators, teachers and students have not got clear guidelines and catalogues which could help them in the preparation and utilization of instructional materials for a classroom instruction

According to the coordinator of Fitawurari Gebrye Primary School Pedagogical Centers' adequate and continuous orientations on how to prepare and use instructional materials should be provided for school principals, teachers, Pedagogical Centers' coordinators and students. Secondly, an exclusive budget should be allocated from the higher responsible bodies- Regions, Zones, Woredas and school management to all respective Pedagogical Centers to enable them function effectively. Thirdly, School Pedagogical Centers' coordinators should get free time-- less teaching load, to coordinate the activities of Pedagogical Center effectively. Lastly, the attitude of considering Pedagogical Centers as merely giving service in preparing instructional materials for the teaching-learning activity by higher management bodies and users in the system should be avoided.

However, in any educational system which has low level skilled manpower and minimal or no training at all, orientation about the ways and means of preparation and utilization of instructional materials is necessary.

In order to assess whether or not the respondents of this study have got the required training on the objectives and functions of Pedagogical Centers as well as on the preparation and utilization of instructional materials, a question was included in the questionnaire. Table 6 shows the results.

Table 6: The State of Training as Reported by the Respondents

(N^o = 203)

Respondents	Trained		Untrained		Total	
	N ^o	%	N ^o	%	N ^o	%
woreda Education experts	5	26.3	14	73.6	19	100
School principals	3	15.7	16	84.2	19	100
Teachers	8	5.5	136	94.4	144	100
School Pedagogical Center coordinators	6	28.5	15	71.4	21	100

A very few respondents reported that they had got some sort of orientation but the majority of them responded the opposite. Table 6 indicates that 26.3 percent from the Woreda education experts, 15.7 percent of the principals, 5.5 percent of teachers and 28.5 percent of the School Pedagogical Centers' coordinators had said that they had had the opportunity once about preparation and utilization of instructional materials within a very limited duration (3-4 days) after they had graduated from the Institutes of Teacher Training whereas 73.6 percent of the Woreda experts, 94.4 percent of the teachers, 71.4 percent from the Pedagogical Centers' coordinators and 84.2 percent of the principals claimed that they did not have such an opportunity after their graduation from Teacher Training Institutes. A close observation of the

data in Table 6 indicates that the majority of the respondents, 181 (89.1 percent), had no training in preparing and utilizing instructional materials from locally available materials. From those who responded that they had got training on preparation and utilization of instructional materials in Table 6, all the 22 (100 percent) said that the training given to them was not adequate.

Furthermore, as it has been observed by this researcher that only 5 (20.8 percent) of the sample schools of the study had poorly organized libraries. There were no adequate references and other printed materials which could be used for each subject and grade level. On the other hand, 19 (79.1 percent) of the sample school had no library service at all.

The variety and quantity of instructional materials are currently becoming so vast in the teaching-learning process. Hence, special knowledge on how to prepare and use them is needed. Mastery of instructional materials cannot longer constitute merely an incidental aspect of personal preparation. It is also difficult to expect a teacher to teach effectively his/her subjects for his/her students unless he/she has a skill how to utilize the whole instructional materials in a classroom instruction. With other relevant strategies, this can be possible through a special training of personnel involved in the system. A teacher has to be trained to use instructional materials which are used in his/her classroom teaching rather than in the traditional way of teaching. The respondents of the study were also asked to mention possible measures, that should be taken to strengthen Pedagogical Centers. Among the several responses of the respondents, the most frequently given were:

- providing continuous and adequate training on the functions and objectives of Pedagogical Center in general, and on preparation and utilization on instructional materials in particular to the adopting units.

- allocating adequate and exclusively held budget to activate the function of School Pedagogical Centers effectively.
- reducing the teaching load of School Pedagogical Centers' coordinators.
- assigning trained manpower at the various levels of the system.

4.1.3. Participation of Teachers in Preparing and Utilizing Instructional Materials in School Pedagogical Centers.

The various instructional materials require careful planning on the part of the teacher. He/she must decide when, what, how materials are to be used best to the advantage of students. One role expected from a teacher is to prepare and use instructional materials in his/her classroom teaching. However, in most cases, there is still a problem of using instructional materials according to the needs, interests and abilities of students. Even when materials are available, teachers are reluctant to use them in their classroom teaching.

The school principals and the School Pedagogical Centers' coordinators were asked to rate the degree of teachers' participation in preparing and utilizing instructional materials for their teaching purpose. Table 7 shows the result of the responses.

Table 7: Participation of Teachers in Preparing and Utilizing Instructional Materials
(N^o = 40)

Respondents	Degree of Participation									
	High		Medium		Low		None		Total	
	N ^o	%	N ^o	%	N ^o	%	N ^o	%	N ^o	%
School Principals	1	5.2	2	10.5	16	84.2	-	-	19	100
School Pedagogical Center coordinators	5	23.8	6	28.5	10	47.6	-	-	21	100

In Table 7, about 84.2 percent of the school principals and 47.6 percent of the School Pedagogical Centers' coordinators responded that participation of teachers in preparing and utilizing instructional materials in the Pedagogical Centers was low. Only 5.2 percent of the principals and 23.8 percent of the coordinators rated the participation of the teachers in preparing and utilizing instructional materials as high.

According to the majority, 26 (65 percent) of the respondents as shown in Table 7, one can conclude that the participation of the teachers in preparing and utilizing instructional materials in the Pedagogical Centers was low.

Teachers were also asked to rate their degree of participation in preparing and utilizing instructional materials in the School Pedagogical Centers. It was only 14 (9.7 percent) of them

who said that their participation was low. But 130 (90.2 percent) of them rated the degree of participation as high or medium. As it is observed from the responses of teachers, there is a room for doubt whether this claim is altogether true. For it to be accepted as a genuine response, at least the majority of the school principals and the Pedagogical Centers' coordinators must have responded that the teachers' participation is high or medium. This seems to be a cover for not exposing oneself. Thus, this may be enough ground to question the claim of teachers that they had high or medium participation in preparing and utilizing instructional materials in the School Pedagogical Centers, and it would be fair to take the response given by the principals and Pedagogical Center coordinators as evidence. In addition, as the researcher of the study had observed the record in the School Pedagogical Centers of the sample schools, the participation of teachers both in preparing instructional materials in the Pedagogical Centers and borrowing them from the Centers had been registered by the coordinators of the Centers everyday and reported to the school office at the end of the week. All the School Pedagogical Centers' coordinators of the sample schools had a record which is used for registering the participation of teachers in the Pedagogical Center activity.

Informal discussion was also held with the coordinators during the observation of the Pedagogical Centers. Most of the time, according to the coordinators, teachers' participation in the Pedagogical Centers is nominal. They did come to the Center not to be considered as a non-participant which inturn would affect in their career structure.

An open-ended question was also included to explore the major reasons that make the participation of teachers in the Pedagogical Centers low. Four major reasons were given by those respondents who responded 'low' for the degree of teachers' participation in preparing

and utilizing instructional materials in the School Pedagogical Centers. According to them, the major reasons were:

- lack of adequate training (45 percent)
- shortage of time (27.5 percent)
- lack of teachers' interest to participate (17.5 percent)
- lack of equipment/materials (10 percent).

Lack of training was the most serious reason identified by the coordinators, principals and teachers. The coordinators and the teachers claimed that shortage of time was the most limiting factor causing their poor performance. Among the teacher respondents 121 (84 percent) had 5-8 periods per day and 134 (93 percent) of them had 24-36 periods per week. However, most respondents in all groups who responded 'low participation' said that teachers have not been given adequate training on how to prepare and utilize instructional materials.

The school principals and the coordinators of the Pedagogical Centers have pointed out the main problems they faced to organize seminars and workshops for the teachers and students during the informal interview held with them. They all said that the schools management or the School Pedagogical Centers were not in a position to organize such programs for their teachers and students due to lack of budget and trained personnel on how to prepare and utilize instructional materials. Because of these shortcomings of the schools, both teachers and students were not exposed to the necessary skills used for preparing and using instructional materials. The coordinator of Berayita Primary School Pedagogical Center, in Awi Zone, has also pointed out that lack of awareness of the role of Pedagogical Center in improving quality of student learning, and the use of traditional way of teaching methodology were also the reasons for unsatisfactory participation of teachers in the Pedagogical Centers'.

All these could add considerable weight to the earlier inference that the most serious reasons for the scarcity of instructional materials were the lack of training and shortage of budget.

On the other hand, during the interview held with the director of the Institute for Curriculum Development and Research (ICDR), he has given his own suggestion about the role of teachers in the teaching-learning process. To teach effectively, a teacher has to use various approaches of teaching with appropriate instructional materials. Preparing, selecting or using instructional materials is one of his/her roles in his/her teaching activity. But from long experiences of our system, teachers' participation in preparing and utilizing instructional materials for a classroom instruction was not satisfactory. Teachers have already got training on how to develop and use instructional materials for their classroom teaching during their stay at the Teacher Training Institutes. According to the director of ICDR, teachers have the information that they should prepare and use instructional materials during a classroom instruction. Its practice however, seems to be neglected. Most teachers were found to be unwilling to prepare and use instructional materials. The lack of adequate training on how to prepare and use instructional materials in the Pedagogical Centers was the reason that teachers mostly have claimed. This is the common reason many teachers raised as a factor for their reluctance in preparing and using instructional materials, but it seems lame excuse though in-service training is necessary.

One means of improving the quality of teaching-learning activity is updating teachers through in-service training. The reasoning here is the rapid and continuous innovations in educational technology push the age-long tradition of teaching methodology to obsolence. In today's of world of specialization and complexity, a teacher's preparation should not be terminated at a year program of training in the Institutes. Therefore, there has to be a necessity for teachers to adequate exposure to instructional materials preparation and utilization skill development at their job. It is an essential means through which expected and positive attitudinal change and skill development can be achieved.

In general, based on the responses from the majority of the respondents and the description mentioned above, it is sound to conclude that teachers have failed to meet one of their roles--preparing and utilizing instructional materials for their classroom teaching to improve students learning and make learning meaningful.

4.1.4. Availability of Equipment in School Pedagogical Centers.

When the instructional materials at hand are inadequate and unsatisfactory to employ in a classroom instruction, the teacher should prepare his/her own instructional materials with the help of the Pedagogical Centers coordinator and students. In order to prepare instructional materials from locally available materials suitable equipment have to be available in the Center.

Though the majority of the respondents of the study reported that the School Pedagogical Centers did face a problem of instructional material scarcity, they were also asked a question which focuses on the availability of equipment in their respective schools. Table 8 depicts this point.

Table 8: Availability of Equipment in the School Pedagogical Centers

(N^o = 203)

Responses	Woreda Education Experts		School Principal		Teachers		School Pedagogical Center Coordinator		Total	
	N ^o	%	N ^o	%	N ^o	%	N ^o	%	N ^o	%
Sufficient	-	-	1	5.2	10	6.9	1	4.7	12	5.9
Not sufficient	18	94.7	18	94.7	122	84.7	13	61.9	171	84.2
None at all	1	5.2	-	-	11	7.6	7	33.3	19	9.3
No response	-	-	-	-	1	0.6	-	-	1	0.4

As shown in Table 8, availability of equipment was considered as not sufficient by most of the respondents 84.2 percent. On the contrary, 5.9 percent of the respondents claimed that the School Pedagogical Centers had sufficient equipment for preparing instructional materials whereas 9.3 percent of them indicated that equipment were not available at all in the Pedagogical Centers.

During the interview with the coordinator of Pedagogical Centers in Amhara Regional Education Bureau, he said that though some attempts were made by the Regional Education Bureau to equip schools with the necessary equipment used for preparing instructional

materials, most of the Primary School Pedagogical Centers still have no sufficient equipment due to the inadequacy of budget. There are many primary schools in the Region whose income generating activities are constrained by lack of resources. This made the schools not to have adequate budget of their own to buy the necessary equipment for facilitating the activity of preparing instructional materials in the Centers. Donors' support for strengthening the School Pedagogical Centers was not also satisfactory. Shortage of equipment in the Pedagogical Centers, therefore, could be one of the reasons that made teachers, students and coordinators of the Centers less active in preparing instructional materials from locally available materials.

What one can infer from Table 8 on page 61 is that scarcity of equipment in the School Pedagogical Centers is one of the serious problems of the Pedagogical Centers in the Region. The shortage of equipment in the Centers would strengthen the idea of considering Pedagogical Centers as nominal establishments in the system.

Before coming to the culmination of the analysis on this part (Table 8), it may be worth to mention an important point from two writers to give more weight and importance for the need of different type of equipment to School Pedagogical Centers. According to Brown and others (1983) and Farrant (1980), the recognition of the need for locally produced instructional materials has encouraged the establishment of resource center (Pedagogical Center in the Ethiopian context), in individual schools. To offer a number of professional and technical services, these Centers have to be well equipped with necessary equipment to be used as instructional materials production centers. Sufficient equipment that enable teachers, students and Centers' coordinators to prepare instructional materials from locally available sources should be there in each School Pedagogical Centers.

In chapter II of this study, it was made explicit that preparing and selecting of instructional materials for a classroom instruction needs a team effort involving teachers and students. Involving students in preparing and selecting the instructional materials used in the teaching-learning activity has instructional value. Students develop their creative skills while participating in the preparation and selection process of instructional materials in the Pedagogical Centers. To do this, however, they have to acquire some practical skill that would help them to prepare instructional materials in the Centers.

In this connection, the School Pedagogical Centers' coordinators of the sample schools were asked to rate the participation of the students in the Pedagogical Centers. All the respondents (100 percent) said that the participation of students in the Centers was very low. The reasons given by the respondents for the low participation of students were similar to the reasons given for the low participation of teachers in the Pedagogical Centers. The different reason mentioned for the

students' low participation is that the students' labour was highly needed by their parents after school hours, particularly, in rural areas.

From the information obtained above, it could be summarized that the students were the remote figures without realistic participation in the Pedagogical centers of the Schools. The researcher with Sive (1983), UNESCO(1984), and Knirk and Gustafson (1986) who said that involving students in producing, selecting and evaluating of instructional materials has important value for a classroom instruction. Learning becomes more effective when students themselves take part in producing, selecting and evaluating process of instructional materials.

To the question included in the questionnaire for the respondents of the study whether or not the Pedagogical Centers are useful establishments in their respective schools, the vast majority 199 (98 percent) of them agreed that Pedagogical Centers are very important units that can assist teachers in improving their teaching activity, in particular, and for quality of education in general. School Pedagogical Centers, according to the responses of the respondents, are Centers where both teachers and students could prepare instructional materials which would help in making student learning meaningful.

Another important question that should follow the discussion on availability of instructional materials and other equipment in the School Pedagogical Centers is how frequently teachers use the instructional materials in order to improve a classroom instruction. Table 9 shows the extent to which teachers use instructional materials in their teaching activity.

Table 9: Use of Instructional Materials by Teachers as Reported by the School Principals, Pedagogical Centers' Coordinators and Teachers.

(N^o = 184)

1. How frequently do teachers use instructional materials in their classroom teaching?	School Principals		Teachers		School Pedagogical Center Coordinators		Total	
	N ^o	%	N ^o	%	N ^o	%	N ^o	%
Every day	2	10.5	16	11.1	1	4.7	19	10.3
As and When needed	15	78.9	125	86.8	17	80.9	157	85.3
Sometimes	2	10.5	3	2	3	14.2	8	4.3
None at all	-	-	-	-	-	-	-	-

Availability of instructional materials in School Pedagogical Centers cannot be sufficient by itself unless teachers and students make use of them for improving the teaching-learning process in classrooms.

As an out-growth of Table 7, Table 9 is intended to gather information on how frequently teachers make use of the available instructional materials in the School Pedagogical Centers. In this connection, 85.3 percent of the respondents confirmed that teachers use instructional materials in their classroom teaching as and when needed. On the other hand, 10.3 percent of them responded that teachers used instructional materials everyday in their teaching activity in a classroom. Besides, 4.3 percent of the respondents claimed that teachers sometimes used instructional materials in their classroom teaching.

A close observation of Table 9 shows that the majority of the respondents asserted that teachers attempt to support their classroom teaching by using instructional materials. However, there could be a doubt about teachers' commitment of using instructional materials in their teaching activity for a number of reasons. Firstly, many researches have ascertained that many teachers are using an age-long traditional way of teaching methodology -- lecture method, in Ethiopian schools. And instructional materials are considered as secondary to verbal presentation. Such teacher dominated classroom instruction has a negative impact on the use of interactive materials for a classroom teaching-learning activity (Amare, 1995_a; 1999). Secondly, about 85.3 percent of the response under the category 'as and when needed' shows that teachers have the whims to use or not to use instructional materials in their classroom teaching. In real sense, it implies that teachers use instructional materials whenever they feel like using them. They can be used only at the whim of individual teachers because they are considered as 'aids' to teaching activity.

The phrase 'teaching aid' has double mistakes. Firstly, it indicates that instructional materials are linked with teaching rather than learning. Secondly, instructional materials are the means

to make clear the abstract concept, principles and ideas, and they are part and parcel of a curriculum . But the phrase 'teaching aid' implies that instructional materials are secondary aids or supports to the teaching-learning process. The concept of 'teaching aid', in general, shows that the teaching-learning activity in a classroom can be properly operational without the presence of instructional materials (Amare, 1995). However, practicing a student-centered classroom instruction in which students are the main actors of instructional materials preparation and utilization is not possible with the preceding conception of teaching aids.

Research evidences also show that children who have access to different instructional materials learn more than those who do not have the access. According to Farrell (1989) and Lockheed and Verspoor (1990) as cited in Amare and Tassew (1996:36), the provision and use of additional learning materials in all subjects and for all topics facilitate students learning. Thus , it is advisable that for every lesson, particularly, in primary school curriculum, there is always one or more learning materials that could be used to facilitate the teaching-learning activity if the teacher desires to do so and has the necessary skills to prepare and use it effectively (Amare and Tassew, 1996:30).

The researcher of this study also observed the instructional material borrowing list of teachers in the sample School Pedagogical Centers. The number of instructional materials used by each teacher in the schools ranged from one to ten till December, 1999. Here, the range of the figure indicates the number of times the teacher borrowed instructional materials from the Pedagogical Center and used in his/her classroom teaching. According to the observation of the borrowing list of instructional materials in each sample School Pedagogical Center, the participation of teachers in using the available instructional materials is very low.

A question was also included in the questionnaire to secure information from the school principals, teachers and School Pedagogical Centers' coordinators whether or not the School Pedagogical Centers had given service for the teachers and students out of the school working hours. Of all the three groups of the respondents, 165 (89.6 percent) said that the Pedagogical Centers were not opened after the schools working hours. The majority of the respondents in each group responded in the negative. For instance, 15(78.9 percent) of the principals, 16 (76.1 percent) of the Pedagogical Centers' coordinators, and 134(93 percent) of the teachers said 'no'.

It is possible to assume , thus, the overall participation of teachers and students in the School Pedagogical Centers' was unsatisfactory, and the Centers were not in such a position to attain their objectives and functions for which they were established.

4.1.5. Support School Pedagogical Centers Get from School Management

Many educationists felt that the objective of a school management is the betterment of curriculum. The most prominent role of a school management as pointed out by Dull (1981: 203-204) is that of liaison and supporter of all the school activities. Apart from its service as a go-between there are other types of roles a school management be held responsible in matters of School Pedagogical Center activities. Effective running of Pedagogical Center activities requires the coordinated effort of the school management.

A school management, thus, has to establish a Pedagogical Center according to the direction and guidance of the higher management in the system, appoints a School Pedagogical Center coordinator(s) from among the staff by considering the skills and general know-how of

preparing instructional materials, allocate sufficient budget for the Pedagogical Center that enable it to activate its function, organizes orientation programs both for teachers and students regarding to the objectives and functions of Pedagogical Centers as well as on how to prepare and utilize instructional materials, arranges discussion forums for exchanging experiences among teachers which help them to improve their competencies and teaching strategies, creates relation with other School Pedagogical Centers for exchanging experiences, inspects the activities of teachers and students in the Pedagogical Centers, etc. (Ministry of Education, 1980). A school management, in general, should make the school situation favourable to promote the functions of a Pedagogical Center for effective curriculum implementation.

In relation to this point, a question was forwarded to the respondents of the study to rate the general effort of school management in facilitating the activities of the School Pedagogical Centers.

Table 10: The State of Support School Management provides to School Pedagogical Center. (N^o= 203)

Respondents	Degree of Support							
	High		Medium		Low		None of all	
	N ^o	%	N ^o	%	N ^o	%	N ^o	%
Woreda education experts	1	5.2	12	63.1	6	31.5	-	-
School Principals	12	63.1	7	36.8	-	-	-	-
Teachers	49	34	83	57.6	12	8.3	-	-
School Pedagogical Center Coordinators	9	42.8	9	42.8	3	14.2	-	-
Total	71	(34.9)	111	(54.6)	21	(10.3)		

As indicated in Table 10, about 54.6 percent of the respondents rated the support School Pedagogical Centers had got from the school management was medium. The other 34.9

percent of the respondents felt that the School Pedagogical Centers were given high consideration by the school management whereas 10.3 percent of them responded that the support School Pedagogical Centers had got from the schools management was low. This variation in the responses of the respondents show that not all school management are equally concerned about the functions of the Pedagogical Centers.

From the responses in Table 10, it can be summarized that the majority of the respondents pointed out that the school management did give due consideration for the Pedagogical Centers when compared with the support provided by the higher management in the system.

the community and other organizations . However, as it had been revealed by most of the coordinators of School Pedagogical Centers during the informal discussion held with them , most of the school management did not have the tradition of providing supports that could be relevant to improve the activities of the Pedagogical Centers. To give this conclusion some ground, it is necessary to refer back to the comments given by the coordinator of Fitawurari Gebrye Primary School Pedagogical Center. During the interview held with him, he said that the school principals (school management) were reluctant to support the activities of the Pedagogical Centers, and to motivate teachers and students to participate in the Centers. Rather, they were more concerned on the enrollment of students and other routine administrative affairs.

Allocating sufficient budget to run the activities of School Pedagogical Centers is one of the role of a school management. An attempt was also made to obtain information whether or not the school management allocate budget for the School Pedagogical Centers. Out of the total respondents of the study, 199 (98 percent) replied that budget was allocated for the Pedagogical Centers. But 158(79.3 percent) of those who responded 'Yes' said that the budget was not inadequate. Most school management allowed budget for the Centers only after

exhausting all other school expenses. According to the responses of the coordinators of the Pedagogical Centers of the sample schools during the informal discussion, school management usually spend some amount of money only for purchasing some raw materials for the Pedagogical Centers used for preparing instructional materials.

The responses provided are sufficient grounds to assume that the school management did not give due attention to the functions of the Pedagogical Centers rather their center of attention was to fill administrative gaps without giving much attention to aspects that promote quality of education.

4.1.6. Attention Given to School Pedagogical Centers by Higher Management and the Community

Pedagogical Centers organized at school level are intended to serve the educational sector by developing local curriculum by adapting the national curriculum to local objectives, organizing training programs to improve the competency, skill, teaching strategy and leadership style of individual teachers and producing necessary instructional materials and assisting teachers on how to utilize such materials in their classroom instruction.

These responsibilities of School Pedagogical Centers reflected in their objectives require well informed and capable staff at all levels of the system (Amare and Tassew, 1996). According to Huberman and Miles (1984) and Purkey and Smith (1983), as cited in Amare and Tassew (1996:31), provision of support to individual schools by the education system management structure is important to improve school effectiveness.

One of the tasks of Pedagogical Centers is to work closely and cooperatively with the community. They involve and mobilize individuals, groups and organizations in the community

to share their knowledge, skills and experiences towards the quality of classroom instruction (Ministry of Education, 1980). The coordination with professionals and organizations helps the Pedagogical Centers to attain financial, materials and professional support for improving quality of education. Table 11 shows the extent to which School Pedagogical Centers get support from the higher management in the system, community and organizations.

Table 11: The Degree of Support School Pedagogical Centers Get from Higher Management, Community and Organizations as Rated by the Respondents.

Source of Support	Degree of Support									
	High		Medium		Low		None at all		Total	
	N ^o	%	N ^o	%	N ^o	%	N ^o	%	N ^o	%
Woreda Education Office	20	9.8	46	22.6	98	48.2	39	19.2	203	100
Zone Education Department	-	-	20	11.1	62	34.4	98	54.4	180	100
Region Education Bureau	-	-	1	0.6	25	15	140	84.3	166	100
Donors/NGOs	1	0.5	3	1.7	14	8.1	154	89.5	172	100
Community	-		4	2.1	17	9.2	162	88.5	183	100
Total Support Received	21	2.3	74	8.1	216	23.8	593	65.5	904	100

The rationale behind Table 11 is to enlist information on the efforts the top management of the educational system structure, community and donors /NGOs make support in encouraging the School Pedagogical Centers to attain their objectives for which they were established. As indicated in Table 11, the School Pedagogical Centers have been obtaining support from the Woreda Education Offices, but was not satisfactory. Accordingly, out of the 203 respondents 9.8 percent of them said that the support School Pedagogical Centers received from the

Woreda Education Offices was high whereas 22.6 percent said medium and 8.6 percent of them responded that the support was low. On the other hand, 19.2 percent of the respondents confirmed that the Woreda Education Offices did not support at all.

Similarly, out of the 180 respondents, 54.4 percent of them responded that no support was received from the Zone Education Departments whereas 34.4 percent said that the support was low. However, the rest (11.1 percent) pointed out that the support was medium.

From the total number of 166 respondents, 84.3 percent of them ascertained that the Regional Education Bureau did not support the School Pedagogical Centers at all. On the other hand, 15 percent said that the support was low. Only 0.6 percent of them responded that the support was medium.

On the other hand, about 89.5 percent out of the total number of 172 respondents confirmed that no participation was seen from the donors /NGOs to support the Pedagogical Center activities whereas 8.1 percent of them said that the support that School Pedagogical Centers got from the donors/NGOs was low. The other 1.7 percent of them responded that the support was medium. The rest (0.5 percent) said that the School Pedagogical Centers got high support.

A question was also included to obtain information from the respondents about the participation of the community to support the School Pedagogical Center. Of all the respondents, 183 (88.5 percent) said that no support was provided to the Pedagogical Centers by the community. However, 9.2 percent of them responded that the support was low whereas only 2.1 percent said that the support was medium.

Looking at the degree of support provided by each source of support, one may observe that the ratings tend to cluster around 'none at all' category. The majority 593 (65.5 percent) of the respondents rated the support School Pedagogical Centers got from higher management, organizations and community as 'none at all'. This indicates that the Pedagogical Centers have not been in a position to activate their function effectively.

Here, it would be important to mention some of the supports provided to the School Pedagogical Centers by the Woreda Education Offices. As it was reported by 60.5 percent of the respondents, the supports include:

- material resource (41.4 percent)
- supervision (23.5 percent)
- short term training on production and utilization of instructional materials (22.7 percent)
- allocating budget (2.4 percent)
- organizing exhibition for exchanging experiences (9.7 percent).

Though the majority of the respondents (65.5 percent) in Table 11 ascertained that the School Pedagogical Centers did not get the necessary supports from higher management of the system, the Regional Education Bureau felt that it has provided some sort of supports to strengthen the Centers. During the interview, the leader of Educational Research and Study Team in the Regional Education Bureau claimed that a relatively better recognition seems to have been given to the role of Pedagogical Centers in facilitating classroom instruction in particular, and in improving the quality of education in general. In the first place, the Regional

Education Bureau has assigned personnel along each structural level -- Zone Education Departments and Woreda Education Offices, that attend to the overall activities of Pedagogical Centers. As a result, attention was being given to the proper functioning of Pedagogical Centers in the Region. For instance, training for the possible multipliers has been provided, simple hand tools have been distributed, and it has also been tried to provide technical assistance for the School Pedagogical Centers by the experts who function at Zone Education Departments and Woreda Education Offices.

However, according to this resource person, the above mentioned supports provided by the Regional Education Bureau did not satisfactorily reach all schools in the Region. This was due to shortage of budget at the Regional, Zonal and Woreda levels.

An interview was conducted with the coordinators of Pedagogical Centers and primary education experts of the sample Zone Education Departments. These resource persons also claimed that they have given a limited orientation on how to prepare instructional materials for the coordinators of their respective School Pedagogical Centers. In addition, though it was limited, budget has been allocated for those School Pedagogical Centers which could not able to generate their income. It has also been tried to offer technical support for the Pedagogical Centers by the experts. However, though the Zone Education Departments have felt that these supports have been provided to the schools, it is not possible to say that it was satisfactory. The reasons, according to these resource persons, were that in the first place, there was a serious problem of budget allocation at school, Woreda and Zonal levels. Secondly, the role of School Pedagogical Centers was neglected by the higher management bodies in the system--no attention was given by the higher management. They further said that though Pedagogical Centers' coordinators were assigned at Zonal and Woreda levels, they have very little or no

needed expertise to provide concrete technical assistance for the School Pedagogical Centers. Because of this, when the coordinators of Pedagogical Centers and experts of primary education visit schools once a year / two years, they do not focus on the improvement of instruction. they rather use to aim at addressing the administrative affairs.

In general there is a conceptualization problem about Pedagogical Centers both at Zonal and higher management in the system. It means that priority is not being given to quality and relevance of education in their plans and activities.

In order to secure information regarding the professional and material/financial support, as a whole, the attention given to the role of Pedagogical Centers, interview was held with the Institute for Curriculum Development and Research (ICDR) Director and with two previous coordinators of the Pedagogical Center Unit in the Institute.

According to the previous coordinators of the Pedagogical Center Unit, before the decentralization of the Ethiopian educational management structure, there was a unit in the ICDR in which the activities of Pedagogical Centers were coordinated and facilitated. At the beginning, the Pedagogical Centers both at awraja and school levels had five functions: Coordination, preparation of instructional material, conducting research and study, organizing training program, and developing appropriate technology. However, through evaluating the activities of the Centers, one of the functions—developing appropriate technology, had been reduced in the 1970s because it does not have direct relevance to the teaching-learning activity.

To organize and activate the functions of the Pedagogical Centers, according to the resource persons, projects were designed at the Central level and many organizations such as UNICEF, EEC, World Bank, African Development Bank etc. were helping the Centers by providing

financial and material supports. Other countries like Kenya and Tanzania had created keen interest and expressed their wish to come to Ethiopia and study the Pedagogical Center Programs. At present, some countries like South Africa and Zembabuye are using the same units by taking the experience from Ethiopia. In general, the establishment of Pedagogical Centers had helped in developing self-reliance.

At present, the decentralized educational policy is being implemented in the Ethiopian education system. This calls for primary level curriculum development to be held at Regional level. Thus, the Regional Education Bureaux and their attendant departments have assumed responsibilities for education at primary school levels. All the responsibilities for production, collection and distribution of instructional materials to the respective schools have been left to the Regional Education Bureaux. The responsibility to attend and coordinate all the activities of Pedagogical Centers has also been left to them. Because of this, the Unit which was respective to the overall activities of Pedagogical Centers ceased its function and has already been closed at Central level. There is no unit which follows and supports or coordinates the activities of Pedagogical Centers at Central level, the previous coordinators of the Pedagogical Center Unit and the ICDR -Director said.

In addition, the previous coordinators have commented that the Unit has to be organized again at the Central level. Because it is instrumental to follow up the standard of education at National level. At present, in some Regions like Amhara Region, the Awraja Pedagogical Centers (APCs) have been closed and are being used for other purposes. This shows that the role of the Centers in improving quality of education seems to have been neglected. Such attitude of considering the Centers as irrelevant establishments to the teaching -learning activity should be erased from one's mind. They have to be equipped with the necessary human and material resources at all levels in the system. An exclusive budget should be

allocated from the higher responsible bodies to all their respective Pedagogical Centers, the ICDR-Director added.

Though Pedagogical Centers are the establishments used for improving quality of education, this does not mean that they are the only guaranters of quality of education. They are, however, important for creating the necessary pre-conditions for the effective curriculum implementation and for continuous improvement of the teaching-learning process.

The director of ICDR said that the Regional Education Bureaux are responsible to facilitate and support such establishments in the decentralized education system of the Country. According to him, since the functions of Pedagogical Center focus more on Pedagogical aspects and are accomplished at school level, it is the school management which ought to be more responsible to run and follow up the activities of Pedagogical Centers. At Federal level the responsibility is making policy and providing technical support if the Regions request it. There is no planned and organized support to facilitate the functions of Pedagogical Centers at Central level the Director said.

An interview was also conducted with the Team Leader of the Audio-visual Section in the Educational Mass Media Agency (EMA). According to the team leader of the section, this section of EMA did not make any linkage with the School Pedagogical Centers. It did not provide any technical or material support for the Centers.

From the above responses of the interviewees, one can conclude that the expectation is that such vital responsibility has to be held by each and every school to make School Pedagogical Centers contribute for the betterment of the whole education system in the country.

of the major factors which contributed to the decline of quality of education prior to 1994. It is also described in the document that the teaching-learning activity was not based on problem-solving approach, rather it concentrated more on theoretical knowledge with little connection to the daily life of students. Students were mainly learning with rote learning approach which promotes memorization rather than critical thinking (Transitional Government of Ethiopia,1994_b:2).

Although the scarcity of instructional materials and the problem of the teaching-learning methodology have been described on the first page of the Strategy document while stating the problem, it is not clearly stated what the Strategy should be for the future in the 'Strategies' part of the document. It is mentioned in the 'Strategies' part (page 18) about instructional materials in only one statement. The statement says that 'The provision of educational materials shall be improved by raising the level of production by the existing institutions, particularly the Educational Materials Production and Distribution Agency (EMPDA), to full capacity, improving on the efficiency of international procurement, promotion of local production by the private sector and expansion international assistance."(Transitional Government of Ethiopia,1994_b:18). The role of instructional materials is also stated in the Strategy document in the context of 'teaching aids' as the phrase ' educational support inputs' clearly indicates. Regarding this confusion and structuring problem, Amare (1995_a) has advocated the change of name and structuring. According to him, this change of name and structure could influence instructional strategies and plan of action.

Though attempts have been made to incorporate the issues of instructional materials at policy level, its practicality at different levels is doubted. The problem of conceptualization of the role of instructional materials has also been observed in what educational officials and teachers

ment (Appendix are listed down.

in Pedagogical

s levels in the

ative aspects of

mation System

istical abstracts.

tional materials

ogical Centers,

id student-made

ment available in

gical Centers

the Ministry of

of the Country.

the total number

ent) of them had

eachers number,

and reported to

s also a monthly

count of schools, teachers, students, sections, etc. and reports to their respective higher management .

From the above descriptions, one could conclude that no system of quality control of education is developed at various levels of the educational system of the Country. The absence of such quality control indicators in the Education Management Information System indicates the presence of a misconception of quality education factors on the part of planners and implementers.

Generally from the descriptions and summarized data in Table 11, it seems that the supports provided and the attention given to strengthen the Pedagogical Centers also gets reduced as one goes up the hierarchy. Moreover, there seems to have a problem of conceptualizing the role instructional materials play in upgrading students learning, and the role of Pedagogical Centers for improving the quality of education by higher educational management in the system. As it has been stated by Amare and Tassew (1996:33) schools can perform better to the extent that the educational authorities outside the school provide support which includes information and training regarding instructional practices, facilities for providing supervisory support, resources the schools need to function successfully, etc. However, one can observe from the data in Table 11 that the overall picture showing supports from top to bottom is not at all satisfactory both in terms of technical assistance and financial/ materials resources.

4.1.7. Functions of Pedagogical Centers

In the Review of the Related Literature, it has been discussed that Pedagogical Centers were established to develop professional competencies of teachers and educational personnel with

Table 12: School Pedagogical Centers' Activities as Rated by School Principals, Teachers and School Pedagogical Centers

(N° = 184)

	Source of Support	High		Medium		Low		Very low		Not functional		Total	
		N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
1.	Preparing instructional materials from local resource.	63	34.2	86	46.7	26	14.1	9	4.8	-	-	184	100
2.	Providing orientation on local curriculum development.	6	3.2	35	19	57	30.9	32	17.3	54	29.3	184	100
3.	Arranging discussion forums on teaching problems.	54	29.3	28	15.2	66	35.8	22	11.9	14	7.6	184	100
4.	Initiating action research.	17	9.2	39	21.1	49	26.6	55	29.8	24	13	184	100
5.	Providing orientation on how to prepare lesson plan.	32	17.3	37	20.1	29	15.7	35	19	51	27.7	184	100
6.	Providing orientation to new textbooks and teacher's guide.	20	10.8	46	25	51	27.7	35	19	32	17.3	184	100
7.	Organizing training program on how to prepare and use instructional materials.	8	4.3	39	21.1	42	22.8	43	23.3	52	28.2	184	100
8.	Making relations with individuals, groups and organizations in the community.	4	2.1	20	10.8	48	26	41	22.2	71	38.5	184	100
9.	Exchanging experiences with other schools.	27	14.6	32	17.3	74	40.2	29	15.7	22	11.9	184	100
	Overall Perception	231 (13.9 %)		362 (21.8%)		442 (26.6%)		301 (18.1%)		320 (19.3 %)		1656	100

As indicated in Table 12, the activities performed by the School Pedagogical Centers have been perceived low or very low by the majority (44.7 Percent) of the respondents on the average. By looking at the performance of each activity, one can understand that the rating in most cases tend to become closer around either under low or very low categories. For instance, of all the respondents (26.6 percent) responded that the performance of the School Pedagogical Centers was low. That is, the Centers were not in a position to assist in improving quality of education. On the other hand, 19.3 percent of the respondents said that all the activities, except preparation of instructional materials from local resources were not performed by the Pedagogical Centers.

Of all the activities performed by the Pedagogical Centers, as has been depicted in Table 12, Preparation of instructional materials from locally available materials was somewhat satisfactory as compared to the other activities. However, this does not mean that the School Pedagogical Centers had sufficient instructional materials. It is to be recalled, however, that in Table 4, about 92.1 percent of the total respondents of this study confirmed that there were inadequate instructional materials in the School Pedagogical Centers. The word 'satisfactory' here is, therefore, used only for comparing each activities that were performed by the Pedagogical Centers. Concerning preparation of instructional materials from locally available materials, the majority of the respondents (80.9 percent) replied that the School Pedagogical Centers had medium /high performance in this area of activity. Another area of satisfactory performance of the School Pedagogical Centers was arranging discussion forums on teaching problems (44.5 percent)

The activity of 'establishing relationship with individuals, groups or organizations in the community to share their experience', on the other hand, has been found to be the lowest

performance of the Pedagogical Centers of the sample schools. It has been responded as 'not functional' by 38.5 percent of the respondents. Therefore, it can be assumed that the instructional materials which are available in the School Pedagogical Centers have been produced by teachers, students and the School Pedagogical Centers' coordinators. The rest of the functions of the Pedagogical Centers indicated in Table 12 have been performed unsatisfactorily.

The information obtained from the different groups of the respondents in Table 12 also indicate that there is variation in their responses on the activities of the School Pedagogical Centers. In some activities teachers are less satisfied with School Pedagogical Centers when compared to the reactions of the coordinators of the Pedagogical Centers. For instance, regarding to 'arranging discussion forums on teaching problems' and 'orientation on how to prepare and use instructional materials', about 9.2 percent and 20 percent of teachers respectively said that they were not performed by School Pedagogical Center at all whereas all the school principals and the coordinators of the School Pedagogical Centers claimed that though the degree of performance varied, these activities were performed by the School Pedagogical Centers. Similar variation of rating would be found in relation to some other School Pedagogical Center activities as well.

The achievement of students learning mostly depends on the effectiveness of a school climate and the professional competencies of teachers. A teacher can be effective in his/her classroom teaching if and only if he/she understands the differences and needs of his/her students and employs a variety of teaching approaches that include different instructional materials. It was for assisting such type of teaching-learning activity and improving the quality of education that the Pedagogical Centers were established in the Ethiopian education system.

However, as indicated in Table12, most area of activities were not performed successfully. It is discouraging to find the School Pedagogical Centers as unsuccessful on the most important functions of them which could have brought improvements in the quality of classroom teaching and which could have increased students' learning gains.

To identify the major constraints of the School Pedagogical Centers, questions were included in the questionnaire of the study. Table 13 indicates the perceived problems of Pedagogical Centers and the respondents were asked to rank them according to their seriousness.

Table 13- The Perceived Constraints of School Pedagogical Centers as Ranked by the Respondents and The Mean-

Ranks and Rank Values of the Problems.

(N^o =203)

Ser. No	Perceived problems	RANKS											Mean-Rank	Rank-value
		1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th		
1	Lack of trained manpower for running the School Pedagogical Centers	96	43	19	9	8	5	6	6	2	4	5	2.6	1
2	Lack of resources (finance, raw materials, equipment	46	54	17	19	16	14	12	7	10	3	5	3.7	2
3	Poor support form school management	9	7	18	12	15	11	18	20	25	32	36	7.3	9
4	Poor support from top management and lack of clear guidelines	5	22	27	29	41	27	17	13	8	13	1	5.1	4
5	Its objectives and functions are beyond its capacity	9	13	11	20	17	19	23	18	27	28	18	6.7	8
6	Lack of interest of teachers towards School Pedagogical Centers	8	5	15	15	16	20	15	17	24	36	32	7.3	9
7	Absence of in-service training of teachers	21	35	51	32	23	20	12	4	2	2	1	3.8	3
8	Inadequate pre-service training of teachers	5	15	29	37	32	25	20	14	15	5	6	5.2	5
9	Unsuitability of the School Pedagogical Center rooms	4	5	11	6	15	27	26	30	23	28	28	7.5	11
10	Shortage of time (high teaching-load)	12	16	14	31	16	19	24	18	22	18	16	6.2	6
11	The absence of Awraja Pedagogical Centers.	14	14	15	17	20	21	19	20	19	17	24	6.3	7

Note: The lower the mean is the upper the rank, and the upper the rank is the most seriousness of the problem.

As it can be seen in Table 13, a list of factors which are supposed to have impact on the activities of School Pedagogical Centers were given ranks by the respondents according to their degree of influence. Through this, the lack of trained manpower for running the Pedagogical Centers, lack of resources (finance, equipment and raw materials), absence of continuous in-service training on the functions of Pedagogical Centers and lack of attention and support as well as clear guidelines from top management are those factors which took the upper four ranks. In other words, these were rated by the respondents as the most serious problems hindering the effective implementation of the functions of School Pedagogical Centers.

At the same time, those possible constraints like unsuitability of the Pedagogical Centers' rooms, poor support from school management and lack of interest of teachers towards the Pedagogical Centers to lower ranks indicating a minimal influence on the Centers' activities. This means that those factors are not felt problems of Pedagogical Centers in their activities. When we look at the rating of the respondents in terms of groups, there is no significant difference in ranks rated by the four groups of the respondents(See Appendix G).

The results summarized in Table 13, clearly show some of the perceived problems which have influenced the functions of School Pedagogical Centers in terms of their degree of seriousness. The problem which takes the fore rank is lack of trained manpower assigned for running the functions of Pedagogical Centers. Most of the functions of Pedagogical Centers need well trained and capable coordinators at all levels,. Having the low qualifications of those individuals working in School Pedagogical Centers of the surveyed schools was not, however,

a serious problems. Out of the total number of the School Pedagogical Centers' coordinators of the sample schools in the study, 76 percent have 12 + TTI level of qualification (See Table 3). However, all had no skills in the area of instructional materials production or skills in the other area of Pedagogical Center activities. As seen from this perspective, therefore, this lack of trained manpower in the School Pedagogical Centers can be considered as one of the most serious problems affecting the functions of the Centers.

The other factors which took the upper high rank (from two to four) appear to be interrelated with each other. In-service training opportunities in the form of seminars, workshops, conferences etc. directed to specific activities of Pedagogical Centers are believed to develop the teachers, coordinators, principals and other educational personnel professional competencies in implementing the functions of the Centers. However, as shown in Table 13 absence of in-service training for teachers, coordinators and principals as well as experts was reported as one of the seriously felt problems of the Pedagogical Centers.

The afore discussed factor points out the existence of reluctance on the part of school management, experts and Pedagogical Centers' coordinators who function at various levels as well as other higher officials in the system as they are the responsible bodies to arrange on-the-job training opportunities. That is why the less emphasis of their support to the implementation of the functions of Pedagogical Center is rated as part of the problems which took the upper ranks denoting a serious influence.

As it has been discussed before, some of the School Pedagogical Centers faced lack of instructional materials prepared at the National and Regional levels. So, it is not surprising high rank belonging to the category of the most serious problems. On the other hand, those

problems such as unsuitability of the rooms of School Pedagogical Centers, poor support from school management and lack of interest of teachers towards School Pedagogical Centers were rated by the respondents as having no serious influence on the activities of the Pedagogical Centers.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Summary

As it was mentioned in the Introduction Part , the study was intended to investigate the effect of Pedagogical Centers on implementing the new curriculum and to identify the outcomes and the major problems School Pedagogical Centers encountered in translating their objectives and functions into practice with particular reference to the Amhara Region. To this effect, the Descriptive Survey approach was employed as the method of the study. Twenty-four First Cycle Primary Schools were selected as source of information from eight Woredas and four Zones of the Region. Questionnaire, interview, observation and document analysis were the data collection instruments used to secure information from Woreda education experts, school principals, teachers, School Pedagogical Centers' coordinators as well as higher educational officials and experts who work at various levels in the system (Zone, Region, ICDR, EMA). The collected data were, then analyzed based on the specified research questions of the study.

Therefore, on the basis of the analysis made on the data obtained through these instruments, the major findings of the study are summarized as follows:

1. This study has revealed that the existing School Pedagogical Centers have no sufficient instructional materials relevant to the teaching-learning process at lower level (First Cycle Primary Schools). This has resulted due to a number of reasons. The major ones were the following

- Lack of training
- Acute shortage of resource (budget, materials and equipment)

- Shortage of time (high teaching-load)
2. It was found that all the surveyed School Pedagogical Centers were ill-equipped with the necessary equipment used for preparing instructional materials in the Centers.
 3. All of the sample schools of the study had no rooms constructed for the purpose of Pedagogical Center . It has been observed that classrooms and staffrooms were being used as School Pedagogical Centers. It was also found that only one room in a school was being used for all activities: preparing instructional materials, displaying, storing the materials and office work purpose for the Center coordinator.
 4. It has been shown by the majority of the respondents of the study that the participation of teachers and students in preparing instructional materials in the School Pedagogical Centers was low. This was due to the fact that both teachers and students were not well acquainted with the necessary knowledge and skills to prepare relevant instructional materials . High teaching-load was also another limiting factor. In addition to this, the students' labour was highly needed by their parents after school working hours, particularly in rural areas. The majority of the respondents have also asserted that the Pedagogical Centers were not opened after school hours.
 5. Though most of the respondents claimed that teachers have been using instructional materials in their classroom teaching as and when needed, the borrowing checklists available in the Pedagogical Centers have indicated that the majority of teachers do not use instructional materials in their classroom teaching.
 6. It was found that the support provided to the School Pedagogical Centers from the school management has been perceived by the majority of the respondents as generally low.
 7. As the supports provided to the School Pedagogical Centers from the higher levels management in the system is concerned; the majority of the respondents (65.5 percent) were

not satisfied. They asserted that no support was provided to the Pedagogical Centers from the higher levels of management in the system.

8. Analysis made on the documents (Policy, Strategy and Annual Statistic Abstracts) has confirmed that the attention given to strengthen School Pedagogical Centers and use of instructional materials was unsatisfactory.
9. Most of the respondents (88.5 percent) have felt that no support was given to the School Pedagogical Centers by the community. The School Pedagogical Centers were found to have no link with the community.

10. The interview results seem to indicate that there was no technical, material/financial assistance provided to the Pedagogical Centers from the Central level after 1994. The cooperation between the Regional Education Bureaux and ICDR or EMA concerning Pedagogical Centers has also been observed to be nonexistent.
11. It was revealed that Pedagogical Centers in the surveyed schools have been engaged more in preparation of instructional materials from locally available materials than in other functions for which they were established.
12. Lack of trained manpower for running the functions of School Pedagogical Centers, lack of adequate resources (finance, raw materials and equipment), lack of in-service training of teachers and Pedagogical Centers' coordinators, and absence of support and clear guidelines from top management in the system were highly ranked by the respondents as the most serious problems affecting the activities of Pedagogical Centers.
13. It has already been observed that the previous Awraja Pedagogical Centers are closed in the Amhara Region. However, most of the experts, teachers, school principals, coordinators of Pedagogical Centers and higher interviewed educational officials have agreed that if the problems of the previous Awraja Pedagogical Centers are given due consideration, they can be of great help for contributing to quality education.

5.2. Conclusion

From the forgoing discussion and findings, it can be concluded that there has been a great scarcity of instructional materials in the surveyed School Pedagogical Centers for the newly developed curriculum. The main reasons identified by the majority of the respondents were lack of training, shortage of budget and shortage of time. This strong deficiency of instructional materials could lead the teachers to practice teacher dominated methodology which promotes students to learn in a passive way. In this kind of classroom instruction situation, the problem-solving or learner-centered approach cannot be realized, and the necessary knowledge, attitude and skills that student could have gained might remain remote.

As it has been observed in this research, all the surveyed schools had no rooms constructed for the purpose of Pedagogical Centers and had no sufficient and necessary equipment for preparing instructional materials from locally available materials in the Centers. The existence of such unfavorable conditions in the School Pedagogical Centers appears to have contributed to the ineffectiveness of their activities.

Availability of instructional materials in School Pedagogical Centers cannot be sufficient by itself unless teachers and students make use of them in the teaching-learning activity. However, it was found that most teachers do not use instructional materials during their classroom teaching. As a result, the teaching-learning activity was conducted in its traditional methodology-- chalk-and -talk method, which promotes rote learning (memorization) instead of developing problem-solving skill. This kind of methodology can inhibit effective students learning according to some authorities.

Preparing and using instructional materials is one of the roles of a teacher for his/her classroom teaching. But the study has revealed that teachers were reluctant to participate in preparing and using instructional material in the School Pedagogical Centers. Lack of training, shortage of time and equipment were mentioned by the majority of the respondents as the main reasons for low participation of teachers in the Pedagogical Centers. Most of the teachers did not obtain training on the functions of Pedagogical Centers. They have not had adequate technical and professional supports either from training institutions or from higher experts who have the expertise on the overall functions of Pedagogical Centers. In addition to adequate resources to School Pedagogical Centers, the most outstanding requirement for their effectiveness is to create a conducive professional environment for classroom teachers and raise their understanding about the use and importance of Pedagogical Centers. Moreover, teachers need time to participate in the School Pedagogical Centers to change their role and teaching practices. If teachers have adequate time, they will have a chance to participate in the Centers. However, as has been pointed out by the majority of the respondents, teachers' participation in the Pedagogical Centers was unsatisfactory. These could have been some of the reasons why the School Pedagogical Centers did not show clear improvement or positive impact on quality of education in general, and on classroom teaching-learning activities in particular. The effectiveness of School Pedagogical Centers is determined by the active involvement and commitment of teachers towards the Centers.

School Pedagogical Centers are established to serve as resource or training centers where teachers create opportunities for students to develop their knowledge, skills and understanding. In order to make the School Pedagogical Centers work better, the school management is, thus, expected to organize orientation programs on teaching innovations, preparation of

instructional materials, and allocate adequate resources to activate the functions of Pedagogical Centers. That is, each school has a responsible to provide quality education. What was revealed in the research, however, was that the technical, material /financial supports provided to the School Pedagogical Centers by the school management was not adequate. The failure of school management in giving the necessary support for the School Pedagogical Centers will have adverse influence on the effective implementation of the curriculum. Therefore, it can be conclude that one of the causes for the inability of teachers to implement the innovation investigated as intended and to be innovative was the failure of the school management in providing the necessary supports.

The higher levels of management in the education system claimed that they have been providing supports to the Pedagogical Centers, but the contribution was differently perceived by the respondents of the study. As has been discovered in this study, the majority of the respondents ascertained that the support the School Pedagogical Centers had got from the top management in the system, other organizations and the community was insignificant. To develop positive attitude in the school community (principals, teachers, students, school management, etc.) towards School Pedagogical Centers, better availability of resources, use and flow of information in the form of guidelines that describe what the real problems are and the solutions for the problems could have been helpful. Experts working at higher levels in the system, thus, are needed to have a strong capacity to provide technical assistance for effective performance of Pedagogical Centers.

The result of document analysis has indicated that though there seems quality control strategy for the appropriateness of educational objectives and contents, there was no quality control in the case of instructional materials. It has been observed that instructional materials are still

considered as 'teaching aids' by educational planners who function at the higher level of the system. Considering instructional materials as 'teaching aids' is meant that they are secondary to the teaching-learning process. They are considered to be supports for only teachers teaching activity not for students learning.

The majority of the respondents of the study have asserted that no support was provided to the School Pedagogical Centers from the community. As it has been asserted by the respondent, there was no relation between the School Pedagogical Centers and the community. This indicates that all the responsibilities seem to rest on the school principals, teachers and coordinators of the School Pedagogical Centers in order to improve the existing conditions of the Pedagogical Centers.

As it is stated in the finding, of all the areas of activities of the School Pedagogical Centers, the performance on the preparation of instructional materials using local materials has been considered by the most respondents as somewhat satisfactory as compared to other areas of activities of Pedagogical Centers. On the other hand, the performance of the School Pedagogical Centers on the rest of the activities have been considered low or very low. The intention to establish Pedagogical Centers in the Ethiopian education system was not only for producing instructional materials. The objectives for which Pedagogical Centers were established go beyond preparing instructional materials. They have been established to develop professional competency of teachers and other educational personnel through seminars, workshops, conferences, etc., to serve as centers for local curriculum development, disseminating educational information as well as introducing new instructional technologies. However, as it has been revealed by the respondents of the study, there was a wide gap between the intents of the Pedagogical Centers and what was actually being implemented in

practice. This has been evident from the researcher actual observation of the School Pedagogical Centers.

Lastly, the study has already come out with identification of the most serious problems of School Pedagogical Centers. Lack of trained manpower for running the functions of Pedagogical Centers, lack of resources (finance, raw materials and equipment, absence of in-service training exposure for teachers, and absence of clear guidelines and the insignificant support provided from the higher levels management in the system were considered as the most influential problems affecting the activities of the School Pedagogical Centers. Therefore, it seems that the Pedagogical Centers have been made unrealistic in the surveyed schools. Since the above mentioned problems make influence on the School Pedagogical Centers' activities, it becomes difficult for them to put into practice their functions for which they were established unless significant supports provided from the responsible bodies in the system as well as from the community and other organizations outside the system.

5.3. Recommendations

In the light of the findings of the study, it seems reasonable to suggest the following recommendations:

1. Unavailability of sufficient instructional materials and equipment in the School Pedagogical Centers has been consistently indicated by the majority of the respondents of the study as one of the leading factors influencing the activities of the Centers in particular, and the implementation of the newly developed curriculum for primary schools in general. It is,

thus, necessary to give due attention and make great efforts to strengthen them with financial, material resources and trained manpower.

2. It has been pointed out in the study that lack of training was one of the serious problems that affect the participation of teachers in School Pedagogical Centers. Teachers could be more effective in their participation in the School Pedagogical Centers if they have continuous exposure to modern thoughts in utilizing instructional materials and new methods of the teaching-learning practices. In order to raise understanding about the use and importance of School Pedagogical Centers, programs which enable teachers and coordinators to acquire knowledge and skills have to be initiated by their respective school management. The school management, for instance, could arrange workshops, seminars, or conferences where teachers get into groups to discuss on their teaching problems, or to take orientation on how to prepare and use instructional materials in the School Pedagogical Centers. Therefore, continuous and periodical school -based training is necessary to develop new understandings for new teaching-learning practices introduced in the education system.

Another possible way-out could be organizing programs that enable teachers and coordinators to watch other model School Pedagogical Centers in their localities for the purpose of assessing themselves and determining what they could do to improve their participation in their School Pedagogical Centers. The school management (principals) are the prime concerned bodies or individuals to do this because teachers need the support and advice of a school administrator.

3. Participation in School Pedagogical Centers should not be considered as activities performed once or twice a week or a month or a year. It must be taken as a part of teachers' daily work. The School Pedagogical Centers need to be opened to work full

day and out of the school working hours as and when teachers need to participate in the Centers.

4. It was found out in the study that the existing Pedagogical Centers are staffed with personnel who have no the required expertise to accomplish or coordinate the functions of Pedagogical Centers at various levels in the system. This makes the activity short of meeting the intended objectives of the Pedagogical Centers. In order to make School Pedagogical Centers work better, upgrading the personnel who function at various levels in the system (school, Woreda, Zone and Region) would help very much to improve the situation of the School Pedagogical Centers.

Therefore, higher educational institutions need to be encouraged to arrange favorable conditions for establishing special units exclusively responsible for training specialists at diploma, undergraduate and graduate levels who could have expertise in coordinating effectively the activities of Pedagogical Centers and in producing and helping in the application of the instructional materials in the right instructional activities.

5. In order to make School Pedagogical Centers' efforts progressive, more collaboration ought to be made as much as possible with individuals, groups, and organizations in the community. This will help the School Pedagogical Centers to get more and additional sustained and long term professional, financial and material supports.
6. The prevailing trend today is for educational supervision and curriculum implementation being the two sides of the same coin. The thing is that the primary objective of educational supervision is the improvement of instruction. This thought extends to include a novel trend with the claim that the major focus in the attempt to develop and implement the curriculum is the individuals school itself. The conduct by supervisors of school visits, thus, rests on establishing a good teaching and learning environment in the

school. The major function of a supervisor is to aid teachers in improving their classroom teaching.

To make active participation in School Pedagogical Centers' efforts, teachers need a cooperative supervisor other than their school principal engaging in observing them trying out new practices in the School Pedagogical Centers and providing better comments and suggestions. Teachers will feel at this time that they receive much professional stimulation. Therefore, the Woreda Educational Offices and Zonal Educational Departments should be strengthened with adequate budget and trained persons, and be ready to provide teachers the help they need to make better participation in School Pedagogical Centers on regular basis. In addition, teachers evaluation or supervision must be organized in such a way that they encourage use of instructional materials and discourage the traditional way of teaching methods which promote passive learning.

7. In the document analysis, it was found that policy makers and educational planners have not given due attention to strengthen Pedagogical Centers, and it seems to have been grouped instructional materials with educational facilities (buildings, desks chairs, etc.). It has also been observed that instructional materials are considered as "teaching aids" which the concept considers instructional materials as secondary to the teaching-learning activity. Policy makers and educational planners, thus, should give due consideration to the role of Pedagogical Centers in improving quality education movement, and view instructional materials as distinct from school facilities since they are integrated element of curriculum. Exclusive budget should also be allocated by the Regional Education Bureaux and Federal level for instructional materials and equipment other than textbooks provision for strengthening Pedagogical Centers.

8. As has been discovered in this study, the previous Awraja Pedagogical Centers had already been closed and ceased their functions in the Amhara Region. Since Pedagogical Centers have great role in improving quality of education through proper implementation of curriculum, the Regional Education Bureau need to reform its organizational structure instead of neglecting and closing the Awraja Pedagogical Centers. Well-equipped Pedagogical Centers need to be considered at the respective structural levels in the system (Woreda, Zone , Region and Central levels) under the limit of the Country's level of economic development.

9. Since this study cannot show all the problems related to Pedagogical Centers and is confined to the practice going on in one Region of the Country, interested researchers in the field can take up this issue and investigate it in another setting to see the practices of other Regions in the Country.

BIBLIOGRAPHY

- Abebe Bekele (1991). Principles of Curriculum Inquiry. A Teaching Materials for the Course 'Principles of Curriculum Inquiry'. Department of curriculum and Instruction, Faculty of Education. Addis Ababa: AAU (unpublished).
- Adams, E. (1975). *In-Service Education and Teachers' Centers*. London: Pergamon press Ltd. Washington Hill Hall, Oxford.
-
- Amare Asgedom (1995_a) "What is to Be Done to Strengthen the Support Services?" *The Educational Journal*, vol 1, N° 1, pp. 4-6. Addis Ababa: Ministry of Education (Amharic version)
- _____ (1995_b). " Educational Communication" in *Proceedings of the National Workshop on Strengthening Educational Research*. Addis Ababa: AAU Printing Press, pp. 163-178.
- _____ (1998). " Teacher Perception of Educational Problems in Ethiopia." In Amare et. al. (eds) *Quality Education in Ethiopia: Vision for the 21st Century. Proceedings of National Conference in Awasa College of Teacher Education*. Addis Ababa: AAU, pp. 289-298.
- _____ (1999) . " Availability and Use of Instructional Materials in Tigray Primary Schools." *IER-Flambeau* Vol 7, N° 1, pp. 53-65. Addis Ababa: AAU Printing Press.
- _____ and Tassew (1996) . A survey of Pedagogical Centers' in Primary Schools of Addis Ababa. Addis Ababa Region 14 Educational Bureau (unpublished).
- Amhara Regional Education Bureau (1994). Guidelines on pedagogical Centers' Problems and Their Solutions. Bahir Dar. unpublished (Amharic version).

- _____ (1999). *Education Statistics Annual Abstract* (1991 E.C.). Bahir Dar: Plan and Engineering Service.
- Azeb Desta (1984). *Elements of General Methods of Teaching*. Addis Ababa.: AAU (unpublished)
- _____ (1998). " A look at the Concept and Application of the Self-Contained Classroom organization in the Ethiopian Primary Schools.", In Amare et.al (eds) *Quality Education in Ethiopia: Vision for the 21st Century Proceedings of National Conference in Awasa College of Teacher Education*. Addis Ababa: AAU, pp. 299-307.
- Birrara Gebru (1988). *The Significance of Multimedia Approaches in Improving Instructional Process and the role of pedagogical Centers*. Addis Ababa: AAU (unpublished).
- Brown, J.W. et al (1983). *AV Instruction: Technology, Media and Methods*. New York: Mc Graw-Mill. Inc.
- Bullough, R.V. (1978). *Creating Instructional Materials*. Ohio: Bell and Howell Company.
- Chuahan, S.S (1995). *Innovation in Teaching-Learning Process*. New Delli: Vikar.
- Demissew Bekele (1991). *The Attitude of Policy Makers and Potential Adopters on Existing Educational Media and New Communication Technologies in the Ethiopian Educational System* (Dissertation). Graduate School of Cornell University.
- Dereje Terefe (1998). 'Curriculum Development and Implementation .', In Amare et.al (eds) *Quantity Education in Ethiopia: Vision for the 21st Century Proceedings of National Conference in Awasa College of Teachers Education*. Addis Ababa: AAU , pp. 185-192
- Ball, E. W (1981). *Supervision: School Leadership Handbook* Ohio Charles E. Merrill Publishing C.
- Ellington, H. and Race, p. (1993). *Producing Teaching Materials: A Handbook for Teachers and Trainers*. London: Kogan Page Limited.

- Farrant, J.S (1980). *Principles and Practice of Education* (new edition). Singapore: Longman.
- Frankel, J.R, and Wallen, N.e. (1993). *How to Design and Evaluate Research in Education* (2nd ed). New York: McGraw-Hill Inc.
- Glass, G.V. and Hiplains, K.D. (1984). *Statistical Methods in Education and Psychology*. Boston: Allyn and Bason.
- Graig, H. Krafi, R.J. and Plessis, J.du (1998). *Teacher Development: Making an Impact*. Washington, DC: World Bank (Unpublished).
-
- Grant, M (1964). *School Methods with Younger Children: A Handbook for Teachers in Africa*. London: Evans Bras.
- J.C. Aggarwal (1996). *Essential of Educational Technology Teaching Learning Innovations in Education*. New Delhi: Vikas Publishing house Pvt.
- Kassambira. K.p. (1993). *Lesson Planning and Classroom Management*. England: Longman.
- Kindred. L.W. (1968). *The Intermediate Schools*. New Jersey: Englewood Clifts, N.J., Prentice-Hall
- Klugman, E. (1970) . *Teaching in the Elementary School: A Guide to Planning*. Belmont: Fearon Publishers.
- Krink, F.G and Gastafson, K. L. (1986). *Instructional Technology: A statistic Approach to Education*. New York: A Dantree Press Book.
- Locatis, C.N. and Atkinson (1984). *Media and Technology for Education and Training*. Columbus OH: G.E. Merrin.
- McKean, R.C (1971). *Principles and Methods in Secondary Education* (2nd ed). Columbus: Charles Emerrill Publishing company.

- McNeil, J.D. (1990). *Curriculum: A Comprehensive Introduction (4thed)*. Losangeles: Harper Collins Publishers.
- Meaza Bekele (1966). *A Study of modern Education in Ethiopia: Its Foundations, Its Development Its Future, with Emphasis to Primary Education (Dissertation)*. Columbia: Columbia University.
- Ministry of Education (1977) Awraja Pedagogical Center Handbook. Addis Ababa: Curriculum and Supervision Department (unpublished).
- _____ (1980) Awraja pedagogical Center: What It Is and How It Operates Addis Ababa: Supervision and Evaluation Division (unpublished).
- _____ (1982). Awraja Pedagogical Center Progress Report 1977-1981. Addis Ababa: Supervision and Evaluation Division (unpublished).
- _____ (1986) A Quality Study Summary Report (ERGESE). Addis Ababa: Ministry of Education (unpublished).
- _____ (1988). The Role of Awraja Pedagogical Centers in Education. Addis Ababa: Curriculum Department (unpublished).
- _____ (1999). *Education Statistics Annual Abstract (1991 E.C)*. Addis Ababa: Education Management Information System.
- _____ (1999). *Education Sector Development Program Action Plan*. Addis Ababa: Ministry Of Education.
- Nardos Abebe (1995). " Systematized and Integrated Teaching Methodologies". *Educational Journal* Vol.1, N^o.1, pp 8-11. Ministry of Education (Amharic version)
- _____ (1998). "The New Education and Training Policy: Its Implications on Education for the year Ahead ". In Amare et.al (eds) *Quality Education in Ethiopia: Vision for the 21st Century. Proceedings of National Conference in Awasa College of Teacher Education*. Addis Ababa: AAU, pp.19-22.

- Pearson, N.P. (1972). *Learning Resource Centers*. New York: Bugess Publishing.
- Romiszowski, A.J. (1989). *Designing Instructional Systems: Decision Making in Course Planning and Curriculum Design*. London: Kogan Page Ltd.
- Sampath, K. et al (1984). *Introduction to Educational Technology*. New Delhi: Sterling Publishers Ltd.
- Sharp, M.F. (1975). *Child Learning: An Introduction to Educational Psychology*. London: University of London Press Ltd.
- Shores, L. (1960). *Instructional Materials: An Introduction for Teachers*. New York: The Ronald Press Company.
- Sive, M.R (1983). *Selecting Instructional Media*. Colorado: Libraries Unlimited, Inc.
- Sless, D. (1981). *Learning and Visual Communication*. New York: John Wiley and Sons.
- Spencer, K. (1988). *The Psychology of Educational Technology and Instructional Media*. London: Routledge Ltd.
- Taba, H. (1962). *Curriculum Development*. New York: Harcourt Brace Jovano Vich Inc
- Tekeste Negash (1990). *The Crisis of Ethiopian Education: Some Implication For Nation Building*. Upsala: Upsala University.
- Tesfaye Simerta (1990). *Methods of Teaching Formal Education Radio and Television programs. A content Analysis (Dissertation)*. The University of Leicester.
- Teshome Nekatibeb (1998). *Media Utilization and School Improvement: A Case Study of Primary Education Radio Support Programs in Ethiopia (Ph.D. Dissertation)*. Stockholm: Stockholm University.
- Teshome Wagaw (1979). *Education in Ethiopia Prospect and Retrospect*. Ann Arbor: University of Michigan Press.
- Thornbury, R. (1975). *Teachers' Centers*. London: The Anchor Press Ltd.

Transitional Government of Ethiopia (1994_a). *Education and Training Policy*. Addis Ababa: EMPDA.

_____ (1994_b) *Education Sector Strategy*. Addis Ababa : EMPDA.

UNESCO (1984). *The Educational Administration and Instructional Materials*. Paris: IRL Impremeries Revnies Lausenne. S.A

Walklin, L. (1982). *Instructional Techniques and Practice*. Cheltenham: Stanley Thomes Publishers Ltd.

~~Wittich, W.A and Schuller, E.F. (1973). *Instructional Technology: Its Nature and Use (5th ed.)*. New York: Harper and Row Publishers, Inc.~~

Appendix - A

Questionnaire

The purpose of this questionnaire is to collect information on School Pedagogical Centers in Amhara Region . Teachers, school directors, School Pedagogical Centers' coordinators and educational experts from Woreda Education Offices are the major sources of information. The information obtained through this questionnaire is going to be used only for the research purpose. your cooperation in providing genuine information on the subject is highly valuable to complete the study.

Thank you in advance for your cooperation.

Note:

1. Please use (X) mark in front of the item number if he item is not relevant to you.
2. Please indicate your response by circling the letter of your choice except for the questions which require written responses.
3. There is no need to write your name.

7. Service:-

- A. 1 - 5 years B. 6 - 10 years C. 11 - 15 years D.
16 - 20 years E. 21 - 25 years F. Above 25 years

8. The subject you teach at present

- A. Academic B. Aesthetic C. Both Academic and Aesthetic

9. If you are teaching at present, your teaching-load is : _____ / week /day

PART II

1. To what extent does the School Pedagogical Center collect instructional materials relevant for teaching all subjects in all grade levels of the School?

- A. Abundantly B. to some extent C. none of all

2. If your response of item 1 is either "B" or "C", the reasons are:-

- A. Shortage of money
B. Shortage of equipment
C. Shortage of local materials
D. Lack of adequate training on the preparation and utilization of instructional materials.
E. Lack of teachers' interest towards School Pedagogical Centers.
F. Shortage of time
G. Poor support provided by the school management

3. The instructional material materials available in he SPC at present:-

A. They are all prepared by the SPC from local resources.

B. They are all bought from market

C. They are all donated by other organizations

D. Most of them are prepared by the School Pedagogical Centers

E. Most of them are provided by other organizations and individuals.

F. Most of them are bought from market

G. Others (Specify) _____

4. The effort of teachers in preparing the instructional materials in the School Pedagogical Centers and utilizing during their classroom instruction is:-

A. high

B. medium

C. low

D. none

5. If your response for item number 4 is either 'C' or 'D' , what are the reasons?

6. How frequently do teachers use instructional materials from the School Pedagogical Centers for their classroom instruction.

A. everyday

B. when and where needed

C. Sometimes

D. none at all

E. others (specify) _____

7. The type of training you have attended in preparing and utilizing the instructional material is
- A. seminar B. workshop C. exchange of experience with other schools
D. in Teacher Training Institute E. I did not participate in any training
8. If you do participate in one of the types of training which are mentioned in item number 7 the training provided is
-
- A. adequate B. not adequate
9. Is there a habit of mutual sharing of experiences among teachers in the School Pedagogical Center?
- A. Yes B. No
10. The quantity and type of equipment which are used for preparing instructional materials in the School Pedagogical Centers are:-
- A. Sufficient B. not sufficient C. none at all
11. How do you rate the support provided by the school management to the School Pedagogical Centers ?
- A. High B. Medium C. Low D. None at all
12. Is there budget allocated for the function of the School Pedagogical Centers from the school management?
- A. Yes B. No
13. If your response for item number 12 is 'Yes' does the School Pedagogical Centers use it effectively?
- A. Yes B. No

14. If your response for item number 12 is also 'Yes', is it adequate in terms of the teachers' demand? A. Yes B. No
15. Does the School Pedagogical Centers give service for the teachers out of the working hours?
A. Yes B. No
16. Are there supports provided to the School Pedagogical Centers by the Woreda Education Office?
A. Yes B. No
17. If your response for Item number 16 is 'Yes', the type of supports provided are:-

18. How often the educational experts from the Woreda Education Office supervise and monitor the School Pedagogical Centers in a year?
A. Not at all B. Once C. Twice D. Three times
E. More than three times.
19. According to your response for item number 18, if you did not choose "A" as your choice, is the professional assistance provided by the experts to the School Pedagogical Centers adequate?
A. Yes B. No

20. The kind of supports provided by the Zone Education Department to the School Pedagogical Centers are

21. How do you rate the support provided by the Zone Education Department to the School Pedagogical Centers ?

A. High B. Medium C. Low D. None at all

22. The kind of supports offered by the Regional Education Bureau to the School Pedagogical Centers are:

23. How do you rate the support provided by the Regional Education Bureau to the School Pedagogical Centers ?

A. High B. Medium C. Low D. None at all

24. The kind of support denoted to the School Pedagogical Centers by the government and non- government organizations are _____

25. How do you rate the support offered by the government and non-government organizations to the School Pedagogical Centers ?

A. High B. Medium C. Low D. None of all

26. The kind of supports provided by the community to strengthen the activity of the School Pedagogical Centers are:

27. How do you rate the support of the community to the School Pedagogical Centers?

- A. High B. Medium C. Low D. None at all

28. The effort of teachers to invite other persons from the community to share their experiences, knowledge and skills on certain topics for the students is

- A. High B. Medium C. Low D. None at all

29. Do you agree on the presence of the School Pedagogical Centers ?

- A. Yes B. No

30. Give the reason for your response for item number '29'.

31. If you agree on the presence of School Pedagogical Centers , what is to be done to improve its activities?

32. If you disagree on the presence of School Pedagogical Centers , what do you recommend as a better alternative other than the School Pedagogical Centers ?

33. What is your opinion about the Awraja Pedagogical Center being non-functional at present?

PART III

Direction:- After reading the following list of possible tasks of the School Pedagogical Centers , rate each activity which is being performed by the School Pedagogical Centers at present in your school (please use (√) mark for your choice).

No	Activities	Ratings			No performance at all
		High	Medium	Low	
1.	Preparing the instructional materials from local resources				
2.	Providing orientation on local curriculum development and implementation.				
3.	Conducting peer-discussion of teachers on teaching problems.				
4.	Conducting action research				
5.	Offering orientation to teachers on teaching plan.				
6.	Providing orientation to teachers on the new textbooks				
7.	Training on how to prepare and use the instructional materials.				
8.	Making work relation with individuals and organizations in the community.				
9.	Sharing experiences with other schools.				

Appendix - B

Interview

This interview is designed to collect information from those educational personnel who function at different levels. The information to be obtained is going to be used for the research purpose in order to produce a thesis about the effect of Pedagogical Center on the implementation of the new primary curriculum. In this regard, as one of the purposes of the study is to examine the contribution of the educational personnel who are expected to take part in supporting and facilitating the function of the School Pedagogical Centers in implementing the new primary curriculum.

The following three sets of interview items are to be addressed to the Zone Education Department experts, Region Education Bureau experts Institute of Curriculum Development and Research Educational Mass Media Agency experts. The interview is going to be conducted by the researcher of this study.

I Interview Items for Zone Education Department Experts

1. What is the commonly used way of supervision and monitoring to assess the activities of the First cycle Primary School Pedagogical Centers in order to point out their problems and strong points?
2. What kind of supports does the Zone Education Department provide to the First cycle primary School Pedagogical Centers in order to improve their activities for implementing the new primary curriculum?
3. One of the objectives of the school pedagogical centers is to create opportunity for teachers to share their experiences within and outside the schools. In this respect, to what extent has the Zone Education Department attempted to create chance for the First Cycle Primary School teachers regarding to the functions of the Pedagogical Centers?
4. How often do you make direct contact with Woreda Education Offices and primary schools in order to solve the problems faced by First Cycle Primary School Pedagogical Centers?
5. How do you rate the performance of the primary School Pedagogical Centers in implementing the new primary curriculum?
6. At present, the Awraja Pedagogical Centers ceased their functions in some regions. What is your opinion about them?
7. Would you enumerate the strong points and shortcomings the Zone Education Department has encountered in facilitating the activities of the First Cycle Primary School Pedagogical Centers?

II Interview Items for Regional Education Bureau

1. What is the commonly used way of assisting the First Cycle Primary School Pedagogical Centers in order to point out their problems and strong points in implementing the new primary curriculum?
2. What kind of supports does the Region Education Bureau provide to the First Cycle Primary School Pedagogical Centers for implementing the new primary curriculum?
3. To what extent does the Region Education Bureau attempt to accumulate and deliver instructional materials which are procured by purchasing ready-made materials or prepared materials relevant to the new primary curriculum implementation?
4. Does the Region Education Bureau attempt to prepare and distribute written guidelines and other relevant information for the primary school pedagogical centers on how to perform their functions effectively?
5. At present , the Awraja Pedagogical Centers are ceased their function in some regions. What is your opinion about them?
6. Would you enumerate the strong points and short comings the Region Education Bureau has encountered in facilitating the activities of the First Cycle Primary School Pedagogical Centers in order to accomplish their objectives and functions for which they were established.

III Interview Items for the Institute of Curriculum

Development and Research and Educational Mass Media

Agency Experts

1. It was in the light of easing off the problem of quality education that the idea of pedagogical center was introduced in the Ethiopian education system; and as one of the establishments, Pedagogical Centers were established both at Awraja and School levels. The activity of the Centers was supervised and monitored by the Institute of Curriculum Development and Research (ICDR). Is there such a program designed by the institute to support the centers at present?
2. In what ways does the institute provide support to the primary School Pedagogical Centers?
3. What kind of supports does the institute provide to the primary School Pedagogical Centers?
4. At present, the Awraja Pedagogical Centers ceased their function in some regions. What is the reason?
5. Is there a unit which is responsible to follow-up the activity of Pedagogical Center in the institute?
6. What is your opinion about the presence of Pedagogical Centers at school level?

Appendix - C

Observation

This check-list is designed to collect information about the institutional situation of the School Pedagogical Centers. The information to be obtained is going to be used for the research purpose. As one of the purposes of the study is to examine the existing situation of the School Pedagogical centers, the observation of the institution is highly valuable to complete the study.

1. Name of the School _____
Kebele _____ Woreda _____
Zone _____ Year of Establishment _____
2. School work time:
A. Shift system _____ B. Full-time _____
3. Presence of Pedagogical Center _____
4. If there is, your of establishment _____
5. Is/are there coordinator (s) assigned for the Pedagogical Center? _____
6. The number of coordinators _____
her/his their qualification _____
7. Has/s- he have they trained in producing instructional materials and coordinating the activities of the School Pedagogical center? _____

8. His/her/their service as School Pedagogical Center coordinator _____ years.

9. Condition of the Pedagogical Center.

9.1. Production room _____

9.2. display room _____

9.3. Office for the coordinator (s) _____

9.4. discussion room _____

9.5. reading room _____

9.6. others (specify) _____

10. Conditions of the facilities of the Pedagogical Center:

10.1. The types of equipment available in the Pedagogical Center.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

10.2. Most of the equipment are: A. Produced in the School

A. Pedagogical center purchased B. donated C. other (specify)

10.3. Availability of Textbooks

Subject	Grade level and quantity			
	1 st Grade	2 nd Grade	3 rd Grade	4 th Grade
Amharic Language				
English Language				
Mathematics				
Environmental Science				
Aesthetic				

10.4. Availability of reference books

Subject	Quantity
Amharic Language	
English Language	
Mathematics	
Environmental Science	
Aesthetic	

10.5. Type and quantity of instructional materials available in the School Pedagogical Centers for various subjects.

No.	Types of Instructional Materials	Subject	Quantity
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			

10.6. Arrangement of instructional materials in the School Pedagogical Center.

A. poor B. good C. v. good D. excellent

11. The presence of various forms used by the School Pedagogical Center:

11.1. The School Pedagogical Center coordinator performance evaluation form

11.2. Evaluation form of the School Pedagogical Center activities by each
department teachers meeting _____.

11.3. Request form of raw materials and equipment for preparing instructional
materials _____

11.4. Loan form of instructional materials and equipment _____

11.5. Weekly teachers' School Pedagogical Center participation form
_____.

11.6. Daily teachers' School Pedagogical Center participation form

12. Annual School Pedagogical Center budget for its activities _____

13. Source(s) of the School Pedagogical Center budget:

A. Government _____

B. Non-government _____

C. Community _____

D. Others (Specify) _____

14. Students participation in preparing instructional material in the School
Pedagogical Center is:-

A. high B. Medium C. low D. none

15. The status of the School Pedagogical Center in general _____

Appendix - D

List of Sample Schools From the Sample Zones in Amhara Region

No	Name of schools	Grade level	Zone	Woreda	Number of teachers			Number of Students		
					Male	Female	Total	Male	Female	Total
1	Tsegur	1-4	South Gondar	Farta	3	4	7	436	265	701
2	WubAmba	1-4	South Gondar	Farta	3	4	7	316	256	572
3	Fitawurari Gebrye	1-5	South Gondar	Farta	4	8	12	310	338	640
4	Work Meda	1-4	South Gondar	Fogera	2	4	6	400	221	621
5	Arba Amba	1-4	South Gondar	Fogera	4	-	4	418	293	711
6	Woreta	1-5	South Gondar	Fogera	9	3	12	834	751	1585
7	Wondata	1-4	South Gondar	Bahir Dar Zuria	1	4	5	283	166	449
8	Sebatamit	1-4	West Gojjam	Bahir Dar Zuria	2	2	4	234	183	417
9	Megabit 28	1-4	West Gojjam	Bahir Dar Zuria	5	3	8	312	378	690
10	Aferfida	1-4	West Gojjam	Achefer	4	3	7	198	190	388
11	Abchikeli	1-4	West Gojjam	Achefer	3	4	7	243	138	381
12	Gedema	1-4	West Gojjam	Achefer	5	-	5	216	213	429
13	Dangila	1-5	Awi	Dangila	3	5	8	273	254	528
14	Bacha	1-5	Awi	Dangila	4	8	12	288	275	563
15	Berayita	1-4	Awi	Dangila	4	3	7	242	221	463
16	Adg Gusta	1-4	Awi	Banja	2	2	4	268	174	442
17	Chewesa	1-4	Awi	Banja	3	1	4	213	131	344
18	Hbrita	1-4	Awi	Banja	3	1	4	117	94	211
19	Yetebet	1-4	East Gojjam	Shebel Berenta	3	1	4	82	92	173
20	Guaye	1-4	East Gojjam	Shebel Berenta	3	2	5	169	167	336
21	Woinwuha	1-4	East Gojjam	Shebel Berenta	2	3	5	69	132	201
22	Koncherna Sasaberay	1-5	East Gojjam	Dejen	3	2	5	170	156	320
23	Adoadom	1-4	East Gojjam	Dejen	4	2	6	143	160	303

No	Name of schools	Grade level	Zone	Woreda	Number of teachers			Number of Students		
					Male	Female	Total	Male	Female	Total
24.	Alekitam	1-4	East Gojjam	Dejen	3	3	6	122	126	248

Appendix -E

Budget Allocated for the Sample School Pedagogical Centres from their
Perspective School Management for 1991 E.C Academic Year .

Ser. No.	Name of the Schools	Budget allocated for each School Pedagogical Centre
1	Tsegur	Birr 202.50
2	Wubamba	" 404
3	Fitawurari Gebrye	505
4	Workmeda	150
5	Arbamba	50
6	Woreta	500
7	Wondata	350
8	Sebatamit	69
9	Megabit 28	300
10	Aferfida	326
11	Abchikeli	200
12	Gedema	300
13	Dangila	850
14	Bacha	300
15	Berayita	200
16	Adgusta	200
17	Chewesa	250
18	Hbrita	260
19	Yetebet	300.70
20	Guaye	197
21	Woin Wuha	600
22	Koncherna Sasaberay	600
23	Adoadem	320
24	Alekitam	400

Appendix -F

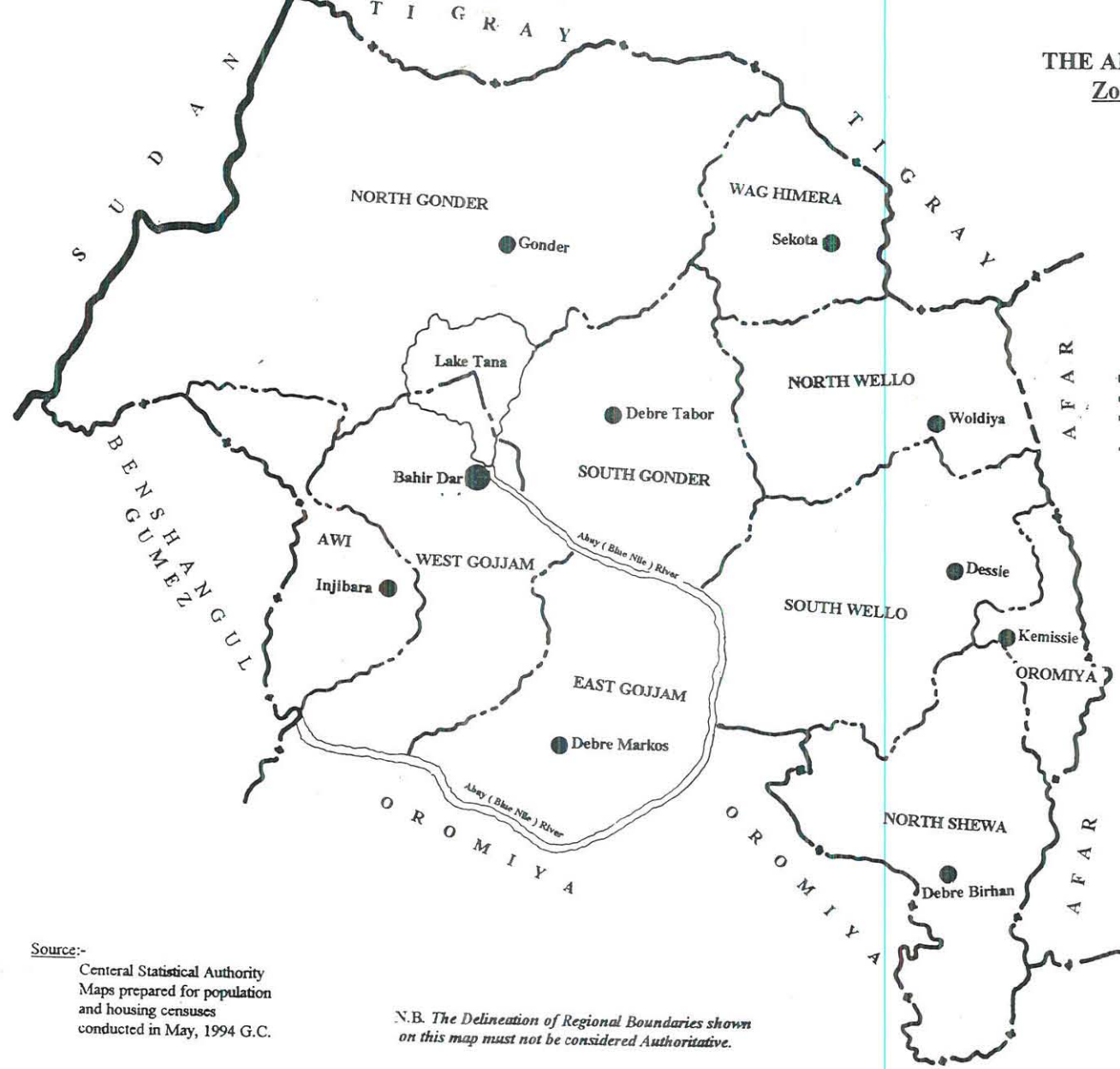
Type and Quantity of Equipment Available in Each Sample School Pedagogical Centres

Ser. No	Name of the School	Type of the Equipment	Quantity
1	Tsegur	-	-
2	Wubamba	7	14
3	Fitawurari Gebrye	12	17
4	Workmeda	5	7
5	Arbamba	8	8
6	Woreta	8	8
7	Wondata	3	5
8	Sebatamit	5	5
9	Megabit 28	4	6
10	Aferfida	8	43
11	Abchikeli	3	3
12	Gedema	2	2
13	Dangila	4	4
14	Bacha	8	9
15	Berayita	4	7
16	Adgusta	6	8
17	Chewesa	3	5
18	Hbrita	5	7
19	Yetebet	9	10
20	Guaye	5	10
21	Woinbula	8	10
22	Koncherna Sasaberay	8	8
23	Adoadem	6	34
24	Alekitain	7	8

Perceived Problems of the School Pedagogical Centers as Ranked by Each Group of the Respondents

Ser. No	Perceived Problem	Woreda education expert		School Principals		Teachers		School Pedagogical Centers' Coordinators		The whole group	
		Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
1	Lack of trained manpower for running the school Pedagogical Center	2.7	1	2.5	1	2.5	1	3	1	2.6	1
2	Lack of resources (finance, raw materials equipment)	3.7	2	3.4	2	3.6	2	3.1	2	3.7	2
3	Poor support from school management	7.4	9	7.2	9	7.1	9	6.7	9	7.3	9
4	Poor support from top management	5.2	4	5	4	4.9	4	4.5	4	5.1	4
5	Its objectives and functions are beyond its capacity	6.6	7	6.5	8	6.6	8	6.5	8	6.7	8
6	Teachers' disinterestedness towards school Pedagogical Centers	7.8	10	7.5	10	7.2	10	7.1	10	7.3	9
7	Absence of In-service training of teachers	4.4	3	3.8	3	3.7	3	3.8	3	3.8	3
8	Inadequate pre-Service training of teachers	5.3	5	5.1	5	5.4	5	5.4	5	5.2	5
9	Unsuitability of the School Pedagogical Center rooms	8.1	11	7.9	11	7.7	11	7.6	11	7.5	11
10	Shortage of time (high teaching-load)	6.2	6	6.1	6	6.4	7	6	6	6.2	6
11	The absence of Awraja Pedagogical Centers	7.1	8	6.2	7	6.3	6	6.1	7	6.3	7

THE AMHARA NATIONAL REGION
Zonal Administrative Division



Legend

- International Boundary
- National Regional Boundary
- Regional Boundaries not clearly demarcated
- Zonal Boundary
- Regional Center
- Zonal Centers

Scale:- 1:2 500 000

Source:-
 Central Statistical Authority
 Maps prepared for population
 and housing censuses
 conducted in May, 1994 G.C.

*N.B. The Delineation of Regional Boundaries shown
 on this map must not be considered Authoritative.*



PPD / BoPED
 1998

July
 1998