

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

PREPARATION AND UTILIZATION OF
INSTRUCTIONAL MATERIALS IN PRIMARY
SCHOOLS OF WOLAYITTA ZONE

**In Partial Fulfilment of the Requirements for the Degree of
Master of Education in Curriculum Studies**



ABRAHAM ASARO SEDA

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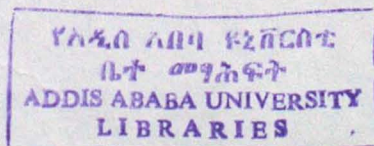
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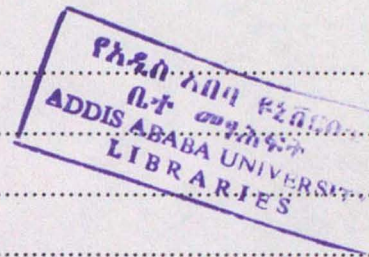
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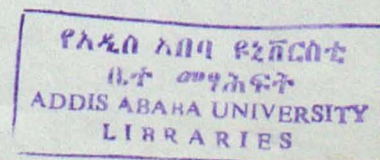
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Abbreviations

APC(s)	Awraja Pedagogical Center (s)
BESO	Basic Education System Over haul
ETP	Education and Training Policy
MOE	Ministry of Education
NGO (s)	Non-Government Organization (s)
PCU	Pedagogical Center Unit
REB	Regional Education Bureau
SNNPR	Southern Nations Nationalities and Peoples Region
SPC (s)	School Pedagogical Center (s)
TGE	Transitional Government of Ethiopia
USAID	United States Agency for International Development
ZED	Zonal Education Department

Abstract

This study investigates factors affecting the preparation and utilization of instructional materials in primary schools of Wolaytta zone. The sources of data were 196 first cycle primary teachers, 17 heads of school pedagogical centers, 17 school principals and heads of pedagogical center unit at woreda level.

The teacher samples were selected by employing the simple random sampling technique. Furthermore, an available sampling technique was employed to select school pedagogical center heads, school principals and pedagogical center unit heads. Questionnaires, observation checklist and interview were used as data gathering tools. The data were analyzed using percentages and descriptive statements. Media-related documents, preparation and utilization, school principals' and SPC heads' activities, the training status, financial and material support, collaborative activities, teachers' attitude and interest were the variables to be analyzed.

The findings of the study, then, showed that teachers and SPC heads lack the necessary knowledge and skills due to inadequacy of training. There is also Lack of financial and material resources. Similarly, school principals and SPC heads were observed to have less competency in accomplishing most of the expected activities. Moreover, the cooperative work among the teaching staff and the involvement of NGOs or the community resources in the school activities were observed to be below expectation. Nevertheless, teachers' attitude and interest towards instructional materials and the effort made by the Regional Education Bureau to produce some media-related references were more or less satisfactory.

CHAPTER ONE

INTRODUCTION



1.1. Background

There is no doubt that appropriate instructional materials enhance the quality of education. Instructional materials relate to all forms of materials with which students and teachers interact for the purpose of effective learning. According to Amare (1999), instructional materials are instruments with which a teacher teaches and from which students learn. Teaching without instructional materials boils down to teaching without technology.

The utilization of instructional technology and the methods in education has a long history. To this point, Devereaux (in Berhane,1999: 1) has to say the following statements:

Since early times, mathematicians or philosophers were tracing diagrams with sticks, which created the need for illustrating the development of ideas with diagrams and drawings. Cave dwellers were also using pictures to express their feelings.

Similarly, Saettler, (in Berhane,1999) has also pointed out that visual instructional materials have started from the time when tribal priests systematized a body of knowledge and invented sign writing to record, preserve, transmit and produce information. According to him, prior to the systematization of the body of knowledge by the tribal priests, the only method of instruction was expected to be the verbal approach, which compelled the learners to memorization. But such trends in education gradually began to change due to the reason that most educators had recognized the danger of verbal method of teaching which demands more memorization of the shadow of meanings.

At present, virtually all authorities in the area of instructional media agree that students can understand a lesson clearly and concretely when teachers use

varieties of instructional materials in their different combinations. To this point, Newby et al. (1996) for instance, agree that instructional materials are decisive for effective and permanent learning. At the same time they raise student involvement and add variety, interest and motivation to the instructional process. In short, instructional media are one independent variable, which cause maximum student learning (Amare, 1999).

The traditional method of learning which mainly relies on the experience of listening and reading limits the development of other experiences which, in turn, are instrumental to further learning. The speaking-listening approach, the most common teaching method in Ethiopian schools inhibits active learning and encourages passive learning,

A syndrome that robs all feelings of student's responsibility for their learning (Amare, 1998: 43).

According to Adams (1956), teachers have the responsibility for recognizing the individual differences in their pupils and for providing materials of instruction which will enable each boy or girl to profit most by his or her school experiences. Such a task involves a constant perusal of materials so that items which will be of interest and will be at the proper reading level can be made available.

Instructional materials have numerous importance in imparting and receiving the pertinent information in the teaching-learning process, and as a whole, they play a crucial role in cultivating a creative mind as well as shaping practice-oriented mind.

On summarizing the importance of instructional materials in teaching-learning process, some research findings, for instance, Stolovich et al. (in Berhane, 1999) and Dale (in Amare, 1999), have indicated that instructional materials, when properly designed and applied in the teaching-learning process, can have the following pedagogical uses: they,

1. Stimulate the learners interest .
2. Facilitate active learning.

3. Give variety to class room techniques .
4. Encourage creative thinking .
5. Overcome the limitations of time and space .
6. Concretize abstract experiences .
7. Make learning more permanent
8. Create the access to invisible realities.
9. Relate theory with practice.
10. Develop continuity of thought .
11. Provide direct interaction of students with the reality of social and physical environment.
12. Make learning more functional by increasing retention.

In general, the impact of instructional materials in the teaching-learning process is very great. However, many educators have suggested some constraints which can impede the proper preparation and utilization of instructional materials. According to the research findings of Kebede (1990), Amare and Tasew (1996), and Berhane (1999), factors affecting the proper preparation and utilization of instructional materials are: lack of training, teachers unfavorable attitude, lack of financial and material support, lack of sufficient time, shortage of equipment and facilities, and so on.

Even though, the above mentioned few research undertakings on factors affecting the preparation and utilization of instructional materials were done in some parts of the country, particularly, in Tigray, some parts of Shoa and Addis Ababa, there are many other regions and zones where the mentioned problems strongly exist, but research has not yet been attempted. For example, Wolaytta is one of such zones where these problems exist. It is with this substantial information that the researcher is initiated to carry out a research undertaking which will focus on the identification of factors affecting the preparation and utilization of instructional materials in the first cycle primary schools of Wolaytta Zone in SNNPR.#

Wolytta Zone is found in Southern Nations Nationalities and Peoples Region (SNNPR)

1.2 Statement of the Problem

According to the Education and Training Policy (ETP) of Ethiopia (1994), one of the aims of education is to strengthen the individual's and society's problem-solving capacity, ability and culture at all educational levels. In the same document (1994:28), it is mentioned as:

Due attention will be given to popular participation, in the production, distribution, utilization, up keep, care and safety of educational materials, educational technology and facilities which are to concrete local conditions.

These statements imply that education should be related to what is prevailing in the environment where the learners are living. In addition, they imply that education should play a key role in narrowing the gap between theory and practice. In this regard, the role of instructional materials is very high in making learning more concrete. For this reason, teachers in all levels in general, and those in primary schools, in particular, are expected to prepare and use instructional materials to facilitate the teaching-learning process. However, as some research undertakings revealed, there are different factors such as lack of financial and material support, inadequacy of training, etc. that can hinder the preparation and utilization of instructional material at school level.

1.3. Aims and Objectives of the Study

The aim of this study is to describe the preparation and utilization of instructional materials and identify the factors that affect their implementation in the first cycle primary education of Wolytta Zone. Moreover, to provide feasible recommendations that encourage preparation and utilization of Instructional Materials.

1.4. Research Questions

In this study, it will be attempted to investigate and seek answers for the following research questions.

1. Do school pedagogical centers have media policy documents and guides for preparation and utilization of Instructional Materials?
2. How sufficiently do school principals facilitate and provide the necessary support to the school pedagogical centers?
3. Are teachers and school pedagogical center (SPC) heads adequately trained?
4. What is the financial capacity of schools to allocate budget for the purpose of Instructional Materials?
5. Do teachers produce and use instructional materials in their lessons?
6. How far do teachers and personnel of school pedagogical centers (SPCs) work jointly for better services?
7. Do NGOs, the community and education offices at different levels support schools financially and materially?
8. What is teacher's attitude and the extent of their commitment towards participating in school pedagogical centers?

1.5. Definitions of Terms

Instructional Media :- are all forms of materials commonly known as

"teaching aids" with which students and teachers interact for the purpose of effective and communicative teaching and learning process.

Media Policy documents:- are reference materials used by teachers and media personnel during the production and use of teaching materials in class rooms.

School Principal:- are responsible persons, leaders or commonly know as Directors who are responsible for both the academic and administrative affairs in the school.

SPC Heads :- are Coordinators who work in pedagogical centers in school level that assist teachers and in general, facilitate the preparation and use of teaching materials.

Teachers' Attitude:- Refers to teachers' interest, commitment or effort to produce and use instructional materials in their lessons.

1.6 Significance of the Study

This study is significant for the following reasons:

1. Since the study of factors affecting the preparation and utilization of instructional materials has not been given much attention in all levels of schools in general, and in primary level in particular, this study will help for the compilation of information on the status and degree of the problem in primary schools.
2. By pointing out the magnitude and location of the problem, the study may draw the attention of educational planners and policy-makers to consider the socio-economic variables in setting priorities and allocating educational resources.
3. It may provide suggestions to concerned offices, teachers, school principals, heads of school pedagogical centers, and the community at large, for finding out remedies to those actual problems affecting the preparation and utilization of instructional materials.
4. The study may also contribute knowledge on the study of problems affecting the preparation and utilization of instructional materials in Ethiopian primary schools and can serve as source of information for further and comprehensive nation-wide study.

1.7 Limitations of the Study

- The researcher believes that it would have been better to conduct the study in a wider scale. Never the less, due to constraints of time, money and other resources, the dimension of this study was confined to the first cycle of primary schools of Wolaytta Zone.

- Due to the same reason, non-government primary schools in this cycle are not included in the study.
- The study considered only visual instructional materials.
- The problem is likely to exist in all 141 first cycle primary schools of the Zone. If this study were to include all these schools as its population, its findings would be more complete and more dependable. But, because of time constraints and inconvenience of conditions, only 17 (12.5%) schools were considered.
- It is believed that more devotion to various literature and research findings would have been to add more knowledge to the topic under investigation, however, due to distance and financial constraints, there is theoretical limitation in the review of literature.
- The researcher has faced financial, manpower, time, transport and communications constraints in the course of data gathering. Had this study been carried out in team, and with more and better resources, it would have undoubtedly been more representative and complete than it is now. And, furthermore, the resultant imperfection that may be found in the product of the research would have greatly been minimized.

CHAPTER TWO

REVIEW OF LITERATURE

Since Instructional materials are integral part of the whole system of instruction, they must be organized in such a way that teachers and students have access to them. Whenever these educational materials or media may be used as instructional tool, it is essential that they relate to one another, complementing each other in the learning process and supporting both group instruction and individual study. To achieve this objective, each school must have a media center where teachers may procure a wide variety of instructional materials and equipment and organize them for use.

This section, therefore, is devoted to various literature and research findings, which are assumed to have relevance to the topic under investigation. Thus, the organization of the section is based upon the meaning of instructional materials, their characteristics and classifications, the role of instructional materials, some features and specific functions of visual instructional materials, the availability, selection, preparation and utilization of instructional materials, and factors affecting preparation and utilization of instructional materials.

2.1 The Meaning Of Instructional Materials

Instructional materials (media) are defined as the carriers of messages from some transmitting source (which may be a human being or an inanimate object), to the receiver of the message (which, in our case is the learner). These carriers of information interact with the learner through his senses (Romiszowski, 1981).

Instructional materials are all sorts of physical means used to carry instructional contents, that means, knowledge, skills and attitudes from various sources to students and they aim at realizing a set of instructional objectives (Heinich, et al. 1996, New by, et al. 1996). According to Locatis and Atkinson (1984), instructional materials are the means (usually audio visual or electronic) for transmitting or delivering messages, and also are like vehicles, which are carriers of

information, or each medium represents a channel of presenting information to the learner. More specifically, they carry, transport and bring factors and concepts, ideas, abilities and values to students in a variety of forms. According to Locatis and Atkinson (1984), instructional media include such things as printed materials, displayable materials like teacher made diagrams, charts and maps, models and specimens, projectable materials, audio materials like radio programs and audio tapes; combinations of sound and films like TV broad casts video tapes and motion pictures; and programmed materials like the computer.

Furthermore, instructional materials relate to all forms of materials with which students and teachers interact for the purpose of teaching and learning. To this point, it is stated in Amare (1999:53) as:

Instructional materials are instruments with which a teacher teaches and from which students learn.

According to Heinich, et al. (1996) and Ullmer [in Betsate, 2000], there is still a wide variation in the terminology used by educators in relation to the term instructional material. This variation occurred as a result of the ever-increasing use of new media in education in different times. The most common terms include audio visual materials, instructional media, instructional materials, audio visual media, instructional technologies, learning resources, educational communications, and teaching aids (Erickson, 1968, Brown J. et al. 1977; Betsate 2000).

2.2 Characteristics Of Instructional Materials

The instructional media we discuss have a variety of characteristics. Some of them are produced to assist in achieving many different purposes, of different levels of difficulty and complexity, paying special respect to the students and to individual process of learning, while others do not (Brown et al. 1977).

Similarly, it will be the teacher's responsibility to choose from among alternative media, and from among many separate items represented in each type of

medium and the resources that match the needs of the teacher and his students. (Brown et al. 1985).

It is essential, of course, that the media the teacher and his students choose be in accordance with learning objectives. But, these media need not be the same for all kinds of learners and instructional situations. Various students often have different ways, as well as preferences, for meeting objectives. This is why teachers should plan to use a variety of media in providing option for dealing with these differences. As a result, they seek an effective match between the instructional material (media) chosen and the learning styles, experiences backgrounds, previous accomplishments, learning skills and preferences of the students who use them. Depending on its unique presentational capability, a medium may address only one or more of the senses. For instance a picture is perceived visually while an audio tape recording is perceived only aurally. On the other hand, a sound film is perceived both aurally and visually while a real object may be perceived by all the senses Mondfrans and Houser [in Betsate, 2000].

According to Banks (1985), the very unique characteristic of a given single medium type would make it effective for some instructional purposes and ineffective for others. For example, printed materials like handouts may be more effective for providing information (teaching facts and concepts) and less effective for teaching skills. Similarly, it is also true that different instructional media can contribute to students learning in different ways (Newby, et al. 1996). This means that some instructional media are better at serving certain instructional functions than others; for instance, chalkboards may be sometimes more expedient and useful for certain specific instructional functions than a motion picture or a video film (Betsate 2000).

If instructional materials are to be truly effective for each learner, the teacher, in selecting them and the subject matter they are to communicate, must take into account at least the following important tenets of media- related learning.

1. Each learner is unique, particularly with respect to the efficiency of his receptor mechanisms and his response capabilities.
2. Perception is the foundation of learning.
3. The learner must become involved and be aware of his purposes.
4. Content and the media used to communicate it, must be suitable to the learner.
5. Teaching strategies must be appropriate.
6. Creativity is the goal of learning that becomes evident through the observable responses of learners (Wittich, A. & Schuller, F. 1973).

For most effective integration of these tenets into their teachings, teachers should use wide varieties of instructional media to help students attain instructional goals. According to Schramm (1977), Nacino-Brown et al. 1982) and Newby et al. (1996), no single media is likely to have properties that make it best for all purposes and that is invariably the most effective one for all kinds of learners and instructional situations.

Several research results have revealed that the effects on teaching and learning are greater when more than one media types are used in their various combinations (Newby, et al. 1996). Various instructional materials should be employed in such a way that they reinforce each other, and through the provision of multi-sensory learning experiences, they allow students the fullest perception of a concept. They also allow provision for individual differences among students.

2.3 Classification And Types Of Instructional Materials

There are a great variety of materials around that can be used to make our meanings more vivid and more interesting. These materials are often referred to as instructional aids or devices in as much as they are used to supplement the teacher's tasks. These materials vary from very simple and inexpensive ones such as the

chalkboard, flat pictures, diagrams, illustrations and maps, to more complicated and expensive ones like the television, movie projectors, sliders and film strip projectors (Naccino-Brown, et al. 1982, Schramm, 1977).

The mere use of these materials, however, does not guarantee effective communication, or effective teaching. It is their careful selection and skillful handling by the teacher that renders them useful in facilitating learning. It is, therefore, important for teachers to become familiar with the various types of instructional materials as well as the values that can be derived from their proper use.

Different authorities on instructional materials and communication developed various models for classifying the diversity of media types into certain broad categories. The most popular and perhaps the most elaborate classification models are based on a common criterion; that is, the way or manner the media types present information, for instance, visual, auditory, etc. Different educators categorized media into different groups and sub-groups. Even with a common classification criterion, these educators did not have the same list of individual categories in their respective models. Nevertheless, based on Naccino Brown, et al. (1982), Reiser and Gangne (in Betsate, 2000), Heinich, et al. (1996), Locatis and Atkinson (1984), Romiszowski (1981), and Brown, et al. (1985), the classifications are summarized as follows :-

I. VISUAL MATERIALS: This category includes: -

- A. Three-dimensional such as objects models and specimens.
- B. Printed materials such as text books, workbooks and programmed instructional materials
- C. Chalk boards
- D. Flannel or felt boards
- E. Bulletin boards
- F. Still pictures:- a) Non-projected such as photographs and illustrations

b) Projected such as slides film strips, over head projections and opaque projection.

G. Graphics such as charts, graphs maps and globes, posters and diagrams.

II AUDIO AIDS

This category comprises radio record players and tape recorders

III AUDIO-VISUAL AIDS:-

That includes motion pictures and television

2.4 The Role Of Instructional Materials In teaching-learning process

The roles of the instructor and the learner are clearly changing because of the influence of media and technology in the classroom. To this point , Heinich, et al. (1996:8) say:

No longer are the teacher and the textbook the sources of all knowledge.

Similarly, because of the development of modern technology, teachers no longer have to rely solely on words to make instructional meanings clear, and at the same time, it is necessary for teachers to have a working knowledge of the criteria to be used in selecting and evaluating instructional materials and the principles underlying their effective use (Naccino Brown, et al. 1982).

The process of teaching and learning is a communication between the teacher and students. The aim of this educational communication, therefore, is to create common understanding between the teacher and students (New by et al. 1996). Obviously, the specific mission of instructional materials, as means of communication, is to facilitate and ensure the creation of common meaning and

understanding (Heinich. et al. 1996). Locatis and Atkinson (1984:3), for instance, have asserted the same idea by saying:

Media are the means (usually audio visual or electronic) for transmitting or delivering messages.

✓ Instructional materials provide a concrete referent for ideas; give concrete meaning to words; raise learning from verbalism to true understanding; create impact, thus make learning meaningful (Betsate,2000).

According to Heinich, et al. (1989), the main value of instructional materials is to improve the balance between concrete and abstract learning experiences. The same educators further said that instructional materials not only provide concrete experiences but also help students integrate prior experiences. ✓

Carlton & Erickson (1968), Naccino- Brown, et al. (1982), Sampath, et al. and Sless (in Berhane 1999), have enumerated the basic roles that instructional materials play as follows:

1. They provide the teacher with the means of extending the horizon of experiences and attract students' interest.
2. They solve communication problems between the teacher and students. ✓
3. They help the teacher provide meaningful sources of information and ensure longer retention of the information gained and also provide direct interaction of students with reality.
4. They provide the teacher with the means of guiding and controlling the desirable responses of the learner in relation to stimulus materials of the learning situation.
5. They facilitate active learning and any expected change in attitude and behavior and provide integrated experiences varying from abstract to concrete.
6. They provide the teacher with the means of overcoming physical difficulties of presenting subject matter.
7. They provide the teacher with a kit of tools to carry out diagnostic, research, and remedial work demanded by up-to-date instructional purposes.

In the same manner, Walkin (1994) has noted that instructional materials have a great value in carrying vivid and realistic information, which is impossible to be obtained by a verbal approach.

To summarize, instructional materials are very essential in accommodating theory with practice, and they also play a vital role in imparting and receiving the necessary information in the teaching learning process. Furthermore, instructional materials clarify abstract concepts and complex ideas, which may be difficult to communicate verbally; illustrate and simplify information that are difficult to understanding (Betsate,2000).

As a final note, instructional materials are very important in supplying relevant and tangible information to the learners in the easiest and desirable way. Similarly, they promote the efficiency and effectiveness of the teaching learning process, and since they attract the learners attention, instructional materials have a value of maintaining disciplinary problems in the classroom.

2.5 Some Features And Specific Functions Of Visual Instructional Materials

Visual materials, being part of general instructional media, include three dimensional materials such as objects, models and specimens; printed materials such as text books; chalk boards; bulletin boards; still pictures; graphics such as charts, graphs maps and globes ,posters, diagrams, etc (Naccino-Brown, et al. 1982). Because so much learning involves visual imagery, the design and use of visuals in instruction is worthy of especial consideration.

According to Heinich, et al. (1996), the over emphasis on words has contributed to the failure of formal education to reach its ideal of universal success. We know that some students learn more readily through visual imagery, and even those who are verbal learners need visual supports to grasp certain types of concepts.

Leith [in Berhane, 1999] states that visual instructional materials increase the recalling power of information in the teaching-learning process. To this point, Brown et al. (1985:29), states as «seeing is believing ». According Dale (1954), most students learn 80 percent from which they see and more importantly they remember greater amount of information from what they see.

Visual instructional materials provide a concrete referent for ideas. Words do not look or sound like the thing they stand for, but visuals are iconic – that is, they have some resemblance to the thing they represent. As such, they serve as a more easily remembered link to the original idea. As indicated in Heinich, et al. (1996), visuals:

- Motivate learners by attracting and holding their attention, and generating emotional responses
- Can simplify information that is difficult to understand. For instance, diagrams can make it easy to store and retrieve such information.
- Can also serve as an organizing function by illustrating the relationships among elements, as in a flow chart or time line.

For purposes of information and instruction, there are a few fundamental principles of visual design that can be pursued even by novices. Good visual design tries to achieve at least four basic goals in terms of improving communication between the message source (teacher) and the receiver (learner). That is, visuals:

- Ensure legibility
- Reduce the effort required to interpret the message.
- Increase the viewer's active engagement with the message.
- Focus attention on the most important parts of the message (Ibid).

Models and real objects, being visuals, are the recommended media when realism is essential for learning. They provide concepts that involve three dimensions, tasks that require identification by size, shape, or color, and hands-on or laboratory practice (Heinich, et al . 1996).

According to Heinich, et al. (1996), real objects such as coins, tools, artifacts, plants and animals are some of the most accessible and involving visual materials in educational use that can be displayed in a central location. Learners can identify them, classify them, describe their functioning, discuss their utility, or compare and contrast them.

Since objects and specimens are real things they provide direct first-hand experiences, which are necessary for concept formation. Students can see, touch, smell or even taste them, hence giving them a richer and more meaningful understanding of the things being learned. However, if the real thing is not available, too large to take to the class, or too small for the naked eye to see, or too dangerous for the students to manipulate, the use of models is very advantageous. To Naccino-Brown, et al. 1982), a model is a recognizable representation of a real thing

On the other hand, a large proportion of the visual instructional materials found in most schools are printed. The reason for this is not that they are considered to be the most effective, but that they are the most accessible and easy to use. The text book and the supplementary reading materials are two broad categories of printed materials that are being used in the classrooms (Callahan, 1966), (Khan and Sharma, 1993).

Similarly, the commonest and most readily available form of media is the chalkboard. It is a versatile device, which can be adapted to any kind of subject and to various types of situations. Like other instructional materials, effective use of the chalkboard lies in the professional and skilful handling by the teacher (Naccino – Brown, et al. 1982).

Generally speaking, the aforementioned visual instructional materials have a peculiar role in providing relevant information and the sense of sight is the most vivid in providing rich experiences to the individual learning.

As a final note, visuals, when accompanying spoken or written verbal information, they present that information in a different modality, giving the

learners a chance to comprehend visually what they might miss verbally (Heinich, et al. 1996).

2.6 Availability Of Instructional Materials

Regarding the availability of Instructional Materials, Heinich et al. (1996:45-46). say :

The majority of instructional materials used by teachers are ready-made and available from the school, district or other easily accessible sources.

According to Heinich et .al, (1996) and New by et al. (1996), teachers have at least three options in obtaining instructional materials. Firstly, they use materials that are readily available in the school pedagogical center, Similarly, teachers and students can have access to the local community resources by organizing field trips or by inviting resource persons to the classroom to share their experiences. Secondly, when the materials obtained are only partly relevant to the subject of study, then they can be modified or adapted by the teachers to meet their specific objectives.

If both of the above options do not work, then the third alternative may be to produce ones own materials. This can be done by teachers and school pedagogical center personnel who have the main responsibility of material production using locally available resources.

In the Ethiopian context, according to Amare (1999), most instructional materials need to be prepared by teachers, students and media personnel. In general, the availability of suitable materials, their appropriate selection, preparation and utilization is extremely important to have success in teaching-learning process.

2.6.1 Selection Of Instructional Materials

Instructional materials do not have to be exotic or expensive to be useful. Small can indeed be beautiful, inexpensive and effective.

In fact, in some situations for instance, isolated, rural areas; places that lack electricity; programs or schools with a low budget – these simpler materials may be the only media that make sense to use (Heinich, et al, 1996). The main point which has to be considered here is that materials of instruction should be selected in terms of the levels of pupil's ability and interest. To this point, Adams (1956:188) has stressed by saying "the greatest responsibility to teachers is that of meeting the needs, interests and abilities of the pupils they teach".

Similarly, teachers have the responsibility for recognizing the individual differences in their pupils and for providing materials of instruction which will enable each boy or girl to profit most by his or her school experiences. Such a task involves a constant perusal of materials so that items which will be of interest and will be at the proper reading level can be made available (Ibid).

When instructional materials are selected, it is better to check whether or not:

- They match the curriculum
- They are accurate and current
- They contain clear and concise language
- They will arouse motivation and maintain interest
- They provide for learner participation (Heinich. et al. 1996).

For the years, scholars have debated about what criteria should be applied in selecting instructional materials. Studies have been conducted to quantify and validate various criteria. For most teachers, choosing the most appropriate materials for specific teaching purposes would probably present a problem. In this connection, Naccino-Brown, et al. (1982) suggest that the following basic criteria worth considering:

- Suitability or appropriateness for the intended purpose. This implies that no one type of material is appropriate for all kinds of learning. Some are more useful in teaching a skill, presenting fact, Showing relation ships, or changing

behaviors or attitudes. Others are more effective in giving back ground information or in summarizing a unit of work. The teacher, therefore, should select materials that would best aid him in achieving his objectives (Ibid).

- Suitability for the intended learners. This means that materials are effective only when they are understood and appreciated by the students using them. Unfortunately, most of the commercially available instructional materials, although attractive, are not always suitable for specific users. The teacher should, therefore, review, preview, or examine these materials to determine whether or not they are within the students' level of understanding as well as within the range of their experiential background. Moreover, teachers might find it more profitable in terms of goal achievement to make their own materials for instruction, such as charts, graphs, diagrams, and maps (Ibid).
- The third criteria to be considered is physical quality:- This includes such qualities as attractiveness, ease of handling and authenticity. Effective materials are capable of attracting attention. Simplicity, color, novelty and sometimes familiarity add to the attractiveness of materials, especially the visual ones. In addition to attractiveness, materials should be easy to handle in the case of visual materials and easy to operate in the case of machines or equipment. Materials should be accurate and authentic. In other words, they should provide a true picture of the things being represented or shown. Thus, it is essential that the information being presented is up to date as well as truthful.
- Other factors to consider in selecting instructional materials are the cost and time involved. Cheap materials are not always the best (Naccino Brown, et al. 1982). The same may be said about the more expensive ones. Materials should therefore, be within the limit of the school budget. To this point (Naccino-Brown, et al. 1982:194-195) writes:

Instructional materials selected should be reasonable in cost without really sacrificing the other desirable qualities.

The media that we select and use for instruction must be capable of transmitting all the information, supplying all the instructional stimuli which the lesson content requires, and the media should also help the learner to engage in the appropriate learning activities. At any rate, the media selected should not hinder the learner in actively participating as required (Romiszowski, 1981).

According to Brown, et al. (1977) and Romiszowski (1981), factors affecting the selection of media for instruction are:

1. Learner-factors such as:
 - Individual differences
 - Attention span
 - The group size to be taught
 - Physical disabilities (poor vision, hearing, etc.)
2. Teacher-factors such as training status
3. Availability of suitable materials & resources
4. Time adequacy
5. Cost effectiveness
6. Practicality.

If resources are scarce, it should be possible to establish priorities, and prune down our ambitions to the size of our pockets. Similarly, in the case of time constraints, one might assign priorities so that the media most important to the effectiveness of the course are produced early and with out delay (Romiszowski, 1981). As Locatis & Atkinson, (1984) noted, teachers or instructors, media specialists and learners are the three primary participants involved in making media selection decisions.

As a summary, selecting instructional media has always been an important responsibility of educators. As new forms of media enter the teaching-learning environment, and existing forms carry greater amounts of information to the learner, this responsibility will become even more important. The key to making

the most informed decisions is to be specific, objective, and systematic when searching for, examining, and trying out various media products (Ibid).

Although there is no unique formula for media selection, there is much that the educator can do in order to make the most appropriate choice. While there is much that educators can and should do to select media objectively, the final decision must rest upon sound professional judgments rooted in the best available information.

2.6.2 Preparation of Instructional Materials

According to Heinich et al. (1996), Ellington and Race (in Betsate, 2000) and Newby et al. (1996), teachers have at least three options in obtaining instructional materials chosen for a lesson. When the selected materials are readily available, then they would be adopted or used as they are. This will save much resource and hence should be teachers' first choice. In addition to this, the teacher and students can also have access to the local resources by organizing field trips or by inviting resource persons to the classroom to share their experiences and expertise with the students.

On the other hand, when the materials obtained are only partly relevant to the subject of study, then they can be modified or adapted to meet the specific objectives. If both of the options do not work, then the third alternative may be to produce one's own materials.

Instructional materials are prepared by teachers and pupils themselves for immediate use in their schools. These materials can of course, be made to apply to the most intimate problems of a school and its environment. The very activity involved in the planning and manufacture of such materials is a teaching instrument (Adams, 1956). To this point, Brown, et al. (1977) and Brown et al. (1985), greatly stressed the importance of local media production to meet special needs and such production activities are especially beneficial as learning experiences for students.

Of the many production processes that are available, a cost-effective process should be chosen. As Locatis & Atkinson, (1984:100) writes:

A process is cost-effective if it is adequate for communicating content, and involves reasonable expense in terms of the number of copies required, number of students affected, and the length of time before the content becomes out dated.

As mentioned earlier, it is easier and less costly to use available materials. However, there may be times when you have only one option, that is, to design your own materials. As is the case with selecting from available materials, certain basic elements must be considered when designing and producing new materials:

- Objectives
- Characteristics of the learners
- Availability of sufficient money to meet the cost of supplies you will need to prepare the materials
- The availability of the necessary expertise to design and produce the kind of materials you wish to use
- Having the necessary equipment to produce or use the materials you intend to design
- Availability of special facilities, if needed, for preparation of the materials
- Sufficient time necessary to design and produce the kind of materials you have in mind (Heinich , et al. 1996).

According to Singh (1982) and Kemp (1968), the production of instructional materials should often be a cooperative venture. Colleagues, experienced people from the local community and students can be involved. Students' involvement is very important for two main reasons; first they will make benefit out of the process of creating materials, and secondly, they can be of good help to the teacher.

To sum up the selection, preparation and use of all types of instructional materials calls for both ingenuity and good judgment. Students and teachers should always be alert to new possibilities in the preparation and use of instructional

materials. Through the wise use of these aids, the teacher will gain security, and the pupils will have greater and richer opportunities for learning.

2.6.3. Utilization of Instructional Materials

Instructional materials by themselves can not do much to improve or promote learning. Their value lies in the professional skill of the teacher in using or handling them. As noted by Heinich et .al, (1996) and New by et .al, (1996), what is extremely important is that how teachers use instructional materials and how they guide students to use them. Success can only be guaranteed when media are properly utilized and effective use of them definitely increases student achievement.

For a more effective use of instructional materials, according to Naccino-Brown, et al. (1982), Brown, et al. (1977), Locatis & Atkinson (1984), Brown et al. (1985). The following, fundamental steps must be considered.

- Step1. Prepare yourself :- A teacher has to familiarize himself with the materials that he intends to use.
- Step2. Prepare the materials: - In order to catch the concentrated attention of the students and to save time, all materials to be used should be arranged and positioned in such a way that they come in hand at the exact time you want to use them.
- Step3. Prepare the environment :- This involves making sure that the environment is conducive to the audio-visual experience planned. If for instance, motion pictures, slides or film-strips are to be used, the room should be properly darkened in order to improve visibility.
- Step4. Prepare the materials: - All materials used should be properly and adequately introduced. Students should be made aware of your purpose for using them and how they fit into the subject being studied

There is obviously a close relationship between selecting and using instructional media. The followings are the generalized principles of media selection and use:

- No one medium is best for all learning purposes.
- Media uses should be consistent with objectives.

- Users must familiarize themselves with media content.
- Media must be appropriate for the mode of instruction.
- Media must fit student capabilities and learning styles.
- Media are neither good nor bad simply because they are either concrete or abstract.
- Media should be chosen objectively rather than on the basis of personal preference or bias.
- Physical conditions surrounding the uses of media affect significantly the results obtained (Brown. et al. 1977), (Brown, et al. 1985).

The general media utilization procedures presented here have emphasized the need for teachers to provide an essential interface between materials produced for use and requirements of particular students in a particular school (Ibid).

Generally speaking, inclusion of media in the process of instruction requires carefully thought purposes as well as judiciously selected kinds of resources appropriate to the subject, the students and the environment.

Successful learning by students in various groupings may depend upon the availability and utilization of the right media to implement instruction.

2.7 Factors Affecting Preparation And Utilization Of Instructional Materials

The effective preparation and utilization of instructional materials can be influenced by a number of factors. Some of the factors such as training status of teachers and media personnel, teachers' attitude and commitment, coordinative activities among teachers and school pedagogical center heads, financial and material support, etc. can foster or hinder the effective preparation and utilization of instructional materials. According to Berhane (1999), these factors can be categorized into two divisions, namely, Human and non-Human factors.

2.7.1 Human-Factors

Some of the human-related factors that can facilitate or hinder the preparation and using instructional materials are indicated below.

Teachers' Attitude Towards Instructional Materials.

The attitude of teachers towards instructional materials is a determinant variable in their effective preparation and utilization. To Berhane (1999), instruction is the arrangement of information and environment to facilitate learning. This arrangement of information and the environment is normally the responsibility of the teachers and the designers of media. The choice of the strategy of instruction determines the environment (the methods, media, equipment and facilities) and the way information is assembled and used. Here, the role of the teacher is paramount in the instructional planning process. Working with other teachers and media specialist, teachers can integrate media into their instruction to greatly magnify its impact on students (Heinich et al. 1996).

James (1971) and Rod well (1978) in their review of various survey studies conducted in America and Britain, indicated that teachers have had a tendency to regard instructional materials as incidental to their teaching role and such attitude had been passed on to successive generation of teachers by their training establishments until the 1960's. Since then, however, they assured that attitudinal changes toward instructional materials have been improved. On the other hand, Rod well (1978) stated that teachers may develop a negative attitude towards instructional materials when they are least oriented.

In connection with this, Nishimoto (in Berhne, 1999) has noted that various research findings confirm that there is a strong tie between teachers' attitude toward any instructional innovation and their effort in implementing it. Similarly, a survey study conducted in Japan in 1963 confirmed that teachers who had a positive attitude towards radio instruction showed a better effort in using it. How teachers view the role of media and technology in the classroom depends very much on their beliefs about how people learn.

To this point, some research undertakings have been carried out in the Ethiopian context. Endale (1984), Kebede (1990), and Fantu (1992), in their respective survey study have indicated that most teachers had favorable attitude towards instructional materials.

Generally speaking, teachers' attitude towards instructional materials can have a vital impact on preparing and using them. Since unfavorable attitude of teachers towards instructional materials can definitely cripple the effective preparation and utilization of the instructional materials, it has to be born in mind that pertinent efforts should be made to enable the teachers to have positive attitude towards instructional materials.

Training Teachers

Constraints that may be encountered in the selection and utilization of media may be overcome or even eliminated by effective training of the teachers and media personnel. Confirming this idea, Romiszowski, (1981:357) writes

Consideration of a detailed nature should therefore be given to ways of preparing teachers to accept and to use any novel instructional media that we plan to adopt.

Since media have become so important to teaching-learning process, it is quite necessary for every teacher to become a producer and an effective user of at least simpler types of media. To this effect, any kind of training on media has to be need-based and practice-oriented. More specifically, workshops as well as college courses on media have to be directed more towards activities and involvement of trainees in handling and operating equipment, selecting, producing and utilizing various types of media. To this point, Melvin and Dennis (in Betsate, 2000, cited an experiment made by a team of subject matter and media specialists in Auburn

University (School of Education) for over a two-year period. The aim was to identify the most effective-strategy for teaching media (production and utilization) to trainee teachers. The result of the experiment revealed that trainees learn much more through simulated and authentic practical experiences rather than through intensive lectures and discussions.

Similarly, Brown, et al. (1977) noted the importance of organizing workshops and In-service training programs to help teachers develop or improve their media production and utilization skills. Scholars such as Naccino-Brown, et al. (1982) and Ellington ad Race (1993) have explained that instructional materials by themselves can not do much to improve learning rather their value lies in the professional skill of the teacher in using or handling them. This can be obtained by training teachers and making them familiar with the various types of instructional materials and their uses. In this regard, Newby, et al. (1996) and Sampath, et al (1990) have stressed that instructional materials will result in waste of money and time with out a competent teacher. Moreover, increased use of instructional media in systematically designed, modularized, learning packages is changing the roles of teachers. To this point, Brown, et al. (1977:355) states as:

Many of the traditional functions of teachers are being replaced by a number of new functions identified as competencies to be mastered through pre-service and in-service training activities.

However, Cropley and Dove (in Berhanue, 1999) have noted that there was a problem in teacher training programmes because they failed to relate theory with practice. For this reason, they claimed that teacher training should be linked closely with the actual classroom situation. Similarly, in the Ethiopia context, Amare, (1999), has noted that most of the teachers have not participated in relevant workshop and training. In connection with this, James and Dove [in Berhane 1999] have criticized over dependency on initial training of teachers. According to them therefore, teachers should get continuous training in their respective areas of study.

On the other hand, Heinich, et al. (1989) based on their survey study which was carried out in some European countries, have mentioned that teachers were observed using different instructional materials due to the improvement in the training programme together with the change of attitude towards them

As a summary, teachers are expected to be knowledgeable, skillful, concerned and effective professionals. Hence, Gross and his associates, and Macdonald (in Berhane/1999) have stressed that the implementation of educational practice in the instructional setting depends upon the competency of the teachers. Further more, Cohen and Manion (1995) have specially underlined that teachers at the primary school level should have the desired knowledge and skills which enable them to teach the children efficiently.

As a final note, therefore, the primary school teachers must get an appropriate training and continuous workshops and seminars on how to prepare and utilize instructional materials.

The Training Status And Responsibility Of Heads Of School Pedagogical Centers

Effective service from the media center requires a special kind of professional and supporting staff. In order to assist teachers in curriculum planning and implementation, professional and media specialists, whose training differs significantly from that of traditional librarians or audio -Visual coordinators are necessary. These specialists must undergo an extensive and unique programme of preparation that will enable them to participate in curriculum making as well as implementation (Khan & Sharna.1993). To this point, Ellis, et al, (in Berhane,1999) have strictly underlined the fact that a school pedagogical center requires a trained person who is equipped with the pertinent knowledge and skills in educational technology in general and visual instruction materials in particular. Similarly they have stated that a pedagogical center should be staffed by a specialist

who is given the necessary skills in his training. This implies, that the head of school pedagogical center is expected to be competent enough in accomplishing various range of activities that are very crucial to achieve instructional objectives.

According to Carlton and Erickson (1968), Sampath, et al. (1990), National Education Association Survey (NEAS) in (Carlton & Erickson, 1968), the duties and responsibilities of audio-visual media coordinators or school pedagogical centers' heads are enumerated as follows:

1. To assist teachers in the wise selection, utilization, evaluating and developing materials of instruction with especial attention to newer media of communication.
2. To work with teachers to improve utilization in the instructional program and give orientation to students regarding instructional materials.
3. To arrange and give in-service workshops and training in different aspects of instructional technology.
4. To keep an inventory of community resources.
5. To be responsible for the care and maintenance of AV equipment.
6. Compile teachers' follow up sheet on monthly orders for audio-visual materials and forward them to the instructional materials center.
7. Assesses the problem of teachers on instructional materials.
8. Work closely with and advise the school principal on all phases of the AV program and arrange working hours for teachers and students.
9. Prepare necessary instructional materials ordered by teachers.

10. To organize a good stock of audio-visual equipment and materials and maintain them in good condition.

As mentioned earlier, a school pedagogical center requires a well competent coordinator so as to support greatly the realization of the educational objectives, and the school pedagogical center head is expected to help teachers in previewing and selecting instructional materials; developing an awareness of new materials; providing facilities and assisting teachers in the evaluation of student progress and materials.

To this point, Alemu (1991) and Amare and Tassew (1996) in their survey studies conducted in Western Shoa and Addis Ababa respectively have indicated that the school pedagogical centers available suffered from lack of trained manpower and, as a result, the centers failed to render a vital contribution to the teaching-learning process. Similarly, Yihdego (1990E.C) and Berhane (1999) confirmed that there was shortage of qualified persons.

To sum up, the pedagogical center at all grade levels in general and those at primary school levels in particular, require well qualified personnel who can run them effectively. And, the pedagogical center head is expected to render the necessary assistance and advice to teachers in the area of instructional technology. Hence, the importance of per-service and in-service training for school pedagogical centers' heads is vital.

The Role Of School Principals In Improving Instruction.

It is a common experience that a school principal is responsible for both the academic and administrative affairs in the school. Since school principals are considered as a prominent figure in the school system to lead all the activities that

go on in the school environment, they need to develop a penetrating insight into the nature of learning products and activities and the ways in which media contribute and the effectiveness of learning. According to Carlton & Erickson (1968) and Berhane (1999), at the primary school level, much is dependent upon the effectiveness of the principal. They further added that the school principal, being a facilitator, must allocate all human, financial and material resources towards the achievement of school goals and objectives. This means that a school principal should allocate enough amount of budget for the purpose of instructional materials which are so relevant for the effective implementation of a curriculum.

To this point, Carlton & Erickson (1968:121) say:

Because school principals are key administrative and supervisory officials in school building units, their full support for the entire program of media services is fundamental to the media director's success

However, such success can be obtained mostly by the principals' dedication, commitment and a positive attitude towards his profession, his knowledge and skill competencies. On the other hand, media directors must take the necessary steps to work with and through them in all matters involving their school staffs, plant, and equipment. It is the principal who allocates enough budget, supervises the preparation and utilization of instructional materials by teachers, assesses the problems of teachers in preparing and using instructional materials. Offers incentives to those teachers who are actively participating in SPC. Plans and arranges seminars or work shops. Gives relevant advices to teachers and encourages discussion on instructional media at staff meetings.

The arguments above indicated that school principals strongly influence the school effectiveness and their role in successful implementation of school programmes.

Nevertheless, according to Leith Wood and Montgomery [in Berhane,1999], most school principals do not play instructional leadership roles successfully. Similarly, Singhal and Postlethwaite [in Berhane,1999] have mentioned that a survey study conducted in primary schools of India showed that school principals do not spend much time on supervision and guidance of teachers. Endalew (1984) and Kebede (1990) in Addis Ababa, confirmed the same idea, in that, school principals were not cooperative in the allocation of necessary budget for the purpose of instructional materials.

As a final note, it is convincing to say that school principals should play a decisive role in successful instructional leadership, particularly, in media services. They should also get appropriate training to be competent enough in the full implementation of instructional materials.

2.7.2 Non-Human Factors

Like the human-factors being discussed earlier, there are also non-human factors that are equally important in the preparation and utilization of instructional materials. The availability and appropriate functioning of school Pedagogical centers, the provision of financial and materials support, time adequacy and the preservation system of instructional materials produced; are some of the non-human factors that can affect the appropriate preparation and utilization of instructional materials.

The Concept And Historical Development Of Pedagogical Center

In schools of any levels, instructional materials could be kept in pedagogical centers, laboratories, libraries, mini media rooms or in the class rooms. According to Amare (2000), these are resource centers that enrich the teaching-learning process and above all that enhance student- learning. Availability and appropriate

functioning of these centers to some extent suggests extending student opportunities for using them and improving their learning.

According to Brown, J. et al. (1977), educational media centers are regarded as laboratories-places where students pursue a full variety of learning experiences, often independently. Similarly, Brown, et al. (1985) states that instructional media resources recommended for and available within a single school will vary according to the range of grade levels taught, financial support provided, needs and abilities of the students, curricular emphases, and the number and qualifications of teachers.

According to Khan and Sharma (1993), the most striking characteristic of a good educational media center is the diversity of its collections that include both printed and non-print materials, each accepted for its own integrity and its value to education.

In order to provide services involving all types of materials, the media center must also be prepared to provide and maintain the necessary equipment. Similarly, in addition to a varied collection of printed materials, media centers also provide auditory, visual, and other types of learning materials.

The term « pedagogical center » or « media center » is used as the name of an institutional unit that coordinates a number of media related services for students and teachers. Other terms that relate to these same services are: learning resource center, instructional materials center, learning resources laboratory, instructional resources center, and educational media center (Brown, et al, 1977), (Carlton & Erickson, 1968).

According to Walkin (in Berhane 1999), pedagogical center has been defined as typically a collection of all forms of learning resources together with some equipment for their manufacture and use by students and teachers. To this point,

Cohn and Manion (1995) have noted that an average resource center today is likely to contain most or all of the following materials: books, periodicals, models, maps, posters, pictures, slides and filmstrips. Based on this, it is logical to say that an average school pedagogical center should, at least, contain all kinds of visual instructional materials.

As indicated in MOE (1982) and Gizachew (1999), the concept of pedagogical center has started in the Ethiopian context with the intention of improving instruction. The initial attempt was conducted in the form of in-service teacher training in which a few teachers from different parts of the country participated. Amare and Tassew (1996), in their writing about the historical development of pedagogical centers, have stated that pedagogical center is an outgrowth of « Gonder Teachers' center ». The same authors, further noted that the root for the establishment of teachers' center in Gonder in 1970 was the acute educational problem of the country. Further more, it is said that this center has paved a new life and direction in the development of the then Awraja pedagogical centers in Ethiopia. To this point, again, Amare and Tassew (1996) have pointed out that the Ministry of Education was initiated to set up the Awraja Pedagogical Centers (APC) because of the urgent need to provide facilities at the rural level .

Even though, there was such efforts towards the advancement of pedagogical centers, according to Amare and Tassew [in Berhane 1999], little was known about the impact of pedagogical centers on classroom teaching because teachers do not actually make use of them. This indicates that the actual condition in the country is not different, that is, most of the school pedagogical centers are inefficient in promoting the instructional process. To this point, Kebede, Alemu, and Amare and Tassew (in Berhane 1999), have confirmed that most of the surveyed schools were poorly equipped and did not have sufficient amount of budget allocation. Similarly, Askale (1995), Yihdego (1990 E.C) Berhane (1999) indicated that the available pedagogical centers lack enough instructional materials. More over, they confirmed that there were some schools without pedagogical

centers. Based on this, we can see that the contribution of the school pedagogical centers in the teaching-learning process at present is low. Hence, a great attention is needed to improve the status of the school pedagogical centers.

The Provision Of Financial And Material Support.

The production of instructional materials requires financial and materials support. This means, the instructional materials that will be produced at the school level need certain amount of budget allocation. To this point, Naccino-Brown, et al. (1982) have noted that there should be some amount of budget allocation for the purpose of instructional materials, Further more, they said that instructional materials should be reasonable in cost without loosing the desirable quality, which implies that they should be with in the limits of the school budget.

In this regard, Brown, et al. (1977:33) say:

Financial and material supports can be obtained from government and non-government organizations, parents, resource persons and the community as a whole.

The community in which a school exists constitutes valuable educational facilities, filled with resources to strengthen and enrich learning, Thus, it is recommended that teachers become as familiar as they can with the resources that surround their school: the special facilities, expert persons, government institutions, industries, and businesses; the geographic-geologic- political-cultural facets available for selective use in their instructional program (Ibid).

According to Brown, et al. (1977), resources through comprehensive school media centers, together with other important media services and resources from out side the school, in the surrounding community, and else where, are basic to individualized learning. Similarly, the selection, local production, and use of

modular learning packages are crucial process in achieving successful results with individualized learning . To use the community as a learning center, teachers need extensive information about the agencies, people, places of interest, and services that are accessible and interested in serving the school. Similarly, those who are responsible for the quality of teaching-learning process, should pay great attention and recognize that the pedagogical center requires adequate fund to fulfill its purpose properly.

Frequently, however, teachers have only limited knowledge of the community in which their students live, grow up, and eventually go to work. Sometimes they do not even live there and know very little about local projects and facilities. Furthermore, research findings have shown that less amount of budget is allocated for educational materials and equipment. For instance, Amare and Tassew (1996) and Endalew (1984) in their survey study in some selected schools of Addis Ababa indicated that the schools did not have their own budget allocation for the purpose of pedagogical centers or instructional materials. Similarly, research undertakings which were conducted in Tigray Region by Yihdego (1990E.C), Askale (1995) and Berhane (999) have come up with a conclusion that the schools did not have enough budget.

Eventhough the contribution of the pedagogical centers in facilitating the teaching-learning is not under question, it is quiet evident from the argument above that much emphasis was not given in allocating considerable amount of budget and material support. This implies that teachers do not utilize instructional materials sufficiently.

Time Adequacy

The allocation of time for various activities is critical factor when making decisions about preparing and using media. Time must be conserved when ever possible. The best technique is the one that accomplishes the objectives in the shortage amount of time for the least amount of money. To this point, Locatis & Atkinson (1984) and Heinich, et .al (1989) have asserted that time is a determinant factor in designing and producing instructional materials. Further more, they have noted that teachers should be a ware of whether or not they can afford whatever

time may be necessary for designing and producing the kinds of materials they need. Regarding this issue, James (in Berhane, 1999) in his research undertaken in European countries confirmed that lack of time was found to be one of the contributing factors to the rejection of the audiovisual technologies by many educators. In addition, Harris [in Kibre, 1991] has ascertained that time constraint was a great problem which inhibited teachers to conduct educational research.

To this point, some local research undertakings have been carried out in different places. For example, Endalew (1984) and Fantu (1992) in Addis Ababa and Yihdego (1990E.C) and Askale (1995) in Tigray Region have indicated that most of the teachers failed to use the school pedagogical centers and prepare instructional materials due to heavy teaching loads. Furthermore, they have concluded that the heads of school pedagogical centers did not run the centers effectively because of their teaching loads.

The above arguments revealed that most teachers do not prepare and use instructional materials due to shortage of time. Nevertheless, according to Romiszowski (1981) and Locatis & Atkinson, (1984), one can estimate production times for each group of lessons, or for each specific presentation. Thus, in the case of time constraints, one might assign priorities, so that the media most important to the effectiveness of the course are produced early and without delay. As a final note, it has to be born in mind that such kind of decision often requires much professional judgment and commitment.

The Preservation System Of Instructional Materials

Instructional materials which are produced at school level should safely be kept in the pedagogical center for future use. In line with this, Heinich, et al. (1989) have greatly stated that schools should have a system for filing, storing and retrieving of instructional media.

In the Ethiopian context, there were some research undertakings which have been conducted in selected schools of Addis Ababa. For instance, Amare and Tassew (1996) and Kebede (1990) have indicated that the instructional materials available in all the pedagogical centers of the sample schools were not well organized, registered and stored. However, it has to be born in mind that a good preservation system of instructional materials is equally important to their production.

Besides, the aforementioned factors, according to Amare, (1999),

- lack of job description for teachers
- lack of a written guide line for preparing and using instructional materials
- lack of student or teacher incentive systems for preparing instructional materials

lack of commitment for allocating reasonable budget for preparation and purchase of instructional materials are some of the observed problems affecting the preparation and utilization of instructional materials.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Design

The main objective of this study was to investigate the factors affecting the preparation and utilization of instructional materials in the first cycle primary school of Wollaytta Zone. The major concern in describing the preparation and utilization of instructional materials in primary schools of Wollaytta Zone involves the investigation of various issues including responsibilities of teachers, school principals and school pedagogical centers heads, the provision of necessary support to media centers, their performance, etc. Pre-conceived hypothesis based on some research undertakings made previously, the review of literature and the researcher's personal experience in teaching profession, provided the necessary insight which helped the researcher in constructing questionnaires and guided interviews.

In this research, the descriptive survey method was employed on the assumption that it would help reveal the current problems in producing and using instructional materials. In this part, some major activities were performed. The first one was review of related literature which was helpful to develop conceptual framework to identify the issues to be included in the study and to develop instruments and strategies of data collection.

Secondly, since there were 141 first cycle primary schools in Wollaytta, it was found necessary to identify schools which do not face any problem in preparing and using instructional materials and be excluded from the study. However, by collecting information from School Directors, examining the quarterly reports of all schools, available in the zonal Education office and from experiences, the researcher has found out that all 141 schools had problems in preparing and using instructional materials, and as a result, they all need to be included in the study.

Thirdly, research instruments were prepared in English, translated into Wolayttigna and pre tested in selected schools. Comments were received as to the contents and desirability of the items. Based on the feed back, the instruments were amended and at last, the finalized questionnaires were administered, interviews were held and institutional observations were conducted.

3.2 Source of Data

The target population of the study encompasses school principals, teachers, heads of pedagogical center unit at Woreda level, and heads of school pedagogical centers in the first cycle government primary schools.

There are 7 Woredas in Wolaytta Zone. These 7 Woredas were categoraized into four groups based on their resource accessibility and communication problems. Four Woredas, one representative from each group, were selected by using the purposive sampling method. The selected sample Woredas were:

1. Soddo Zuria
2. Damot Gale
3. Humbo
4. Kindo Koysha

There are 141 first cycle primary schools in the Zone. Due to lack of time and shortage of resources and for the researcher's convenience, only 12.5 % of the total population was taken as a sample population, and this makes the total number of sample schools to be 17. To do this, four schools from each sample Woreda (2 rural and 2 urban), and 1 more from Soddo Zuria Woreda, were selected by using simple random sampling method, and this makes the total number of sample schools to be 17.

Using an available sampling technique, all sample school principles (17 in number) and heads of Woreda education office pedagogical centers unit (4 in number), heads of school pedagogical centers (17 in number), were involved in the

study. On the other hand, a simple random sampling method was employed to select representative respondents from among the teacher population. Fifty percent of the teacher population from each sample school were selected. In addition, the school pedagogical centers were used as additional sources of information.

The four research sites (Woredas) included in the present study are Soddo Zuria, Damote Gale, Humbo and Kindo Koysa. The details of sites, research settings and number of participants were indicated in Table 3.1 below

Sites	The Study Participants			
	Teachers (N=196)	School Principals (N=17)	SPC Heads (N=17)	PCU Heads (N=4)
Soddo Zuria	59 (30%)	5(28%)	5(28%)	1(25%)
Damot Gale	53(27%)	4(24%)	4(24%)	1(25%)
Humbo	48(24%)	4(24%)	4(24%)	1(25%)
Kindo Koysa	37(19%)	4(24%)	4(24%)	1(25%)
Total	196(100%)	17(100%)	17(100%)	4(100%)

Table 1. Research settings and number of participants

3.3. Instruments of Data Collection

For the purpose of obtaining adequate information for the study, three types of data gathering tools were used. These were questionnaires, observation checklist and interview.

3.3.1 Questionnaires

Three kinds of structured questionnaires were prepared with the intention of securing pertinent information for the study. The questionnaires are: for teachers, school principals and heads of school pedagogical centers

Teachers' questionnaires consisted of items regarding demographic background, attitudes towards instructional materials, training and participation in seminars or Work shops, budget allocation to school pedagogical centers, sources of financial and material assistance, the contribution of school pedagogical centers to instruction, the activities of school principals and heads of school pedagogical

centers, their relationships with the local community, and frequency in preparing and using instructional materials.

School principals' questionnaires dealt with their demographic back ground, budget allocation to school pedagogical centers, sources of material and financial assistance, the contribution of school pedagogical centers to instruction, their relationship with the local community and the activities of school pedagogical center heads.

The questionnaires for heads of school pedagogical centers comprised items pertaining to their demographic background, their training status, budget allocation to pedagogical centers, co-operation between teachers and heads of school pedagogical centers, sources of material and financial assistance, the contribution of school pedagogical centers to instruction, the activities of school principals, and their relationship with the local community and teachers.

3.3.2 Observation Checklist

To supplement the information obtained through questionnaires, structured observation checklist and interview with heads of pedagogical Center Unit at Woreda level were used as data gathering instruments. The observation checklist consisted of items that focus on the presence of school pedagogical centers and their conditions, the preservation and filing system of instructional materials produced, the availability of guides, the types of instructional materials and their quality, and the presence of follow up sheet for each teacher in preparation and utilization of instructional materials.

3.3.3 Interview

Structured interviews were held with 4 heads of Pedagogical Center Unit (PCU) at Woreda level in the form of discussion to elicit more information about their opinion towards various activities regarding school pedagogical centers.

The interview with heads of Pedagogical Center Unit at Woreda level, in the form of discussion, contains items that focus on the training status of teachers and school pedagogical center heads, the presence of guide materials, the collaborative work between teachers, school principals and the heads of school pedagogical centers, the professional, financial and material support from Woreda and Zonal Education Office, and the system of assigning the heads of SPCs to their present jobs.

3.4 Validation of Instruments

The questionnaires were initially prepared in English and given to experts in the English language so as to check the grammatical clarity of the items. Similarly, two experts in instructional media in Regional Education Bureau were involved in assessing and commenting the extent to which the items were appropriate in securing relevant information to the research. Some amendments were then made based on the feed backs from the experts, and then the questionnaires were translated into Wolayttigna, which is the instructional language of the area, in order to alleviate any unnecessary complication in responding to the items. After the translation, two experts from the Wolayttigna Unit at the Zonal Education Department were consulted to review the items for their appropriate translation.

Finally, a pilot test of the questionnaires was carried out in two selected primary schools, and then the items were strictly revised to find out statements that might lack clarity or might be open to questions. After making some modifications, the questionnaires were retyped.

In the final study, the questionnaires were administered to 196 teachers, 17 school principals and 17 SPC heads, in face-to -face situation in order to avoid refusals and the omission of question papers distributed, and clarify points if additional explanations regarding how to respond are required. For institutional observations, a primary school teacher with 14 years of experience in teaching was

recruited as an assistant, under the strict supervision of the researcher, conducted the observation on 17 school pedagogical centers.

3.5 Strategy of Analysis

Information gathered from the responses to the questionnaires, those the researcher witnessed during the field observations and visits, and heard from his sources during interviews were identified, categorized, tabulated, analyzed and described in detail.

In this report, the data are presented quantitatively, descriptive analysis was conducted and percentages are used in interpreting all of the data.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND DISCUSSION OF DATA

This section devotes itself to the presentation, analysis and discussion of the data collected from the sample respondents through structured questionnaires, personal observation using institutional survey checklist and interviews. The data are presented in tables and analyzed using percentages and descriptive statements. The numerical values that are presented in percentages were calculated to the nearest whole numbers.

4.1 Preparation and Utilization of Instructional Materials by Teachers.

Instructional materials have numerous importance in imparting and receiving the necessary information in the teaching –learning process, and as a whole, they play a crucial role in cultivating a creative and practice-oriented mind. To this point, Betsate (2000) pointed out that students can understand a lesson clearly and concretely when teachers always use variety of instructional materials in their different combinations.

In line with this, the researcher has made an attempt to assess the frequency of preparation and utilization of instructional materials by teachers in the target schools.

Teachers, school principals and SPC heads were asked on how frequently teachers prepare instructional materials. Furthermore, SPCs were observed and the heads of pedagogical center unit (PCU) at Woreda level were interviewed to express their opinion towards teachers' performance in preparation of instructional materials. As the result indicated, majority of the teachers do not prepare instructional materials in their lessons. The over all information, as obtained directly from the respondents, is presented in the following table.

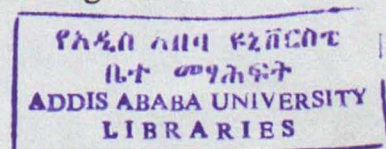


Table 2. Frequency of preparation of instructional materials by teachers.

Respondents	Frequency of preparation			
	Always	Sometimes	Rarely	Total
Teachers (N=196)	15 (8%)	149 (76%)	32 (16%)	96 (100%)
SPC Heads (N=17)	–	11 (65%)	6 (35%)	17 (100%)
School Principals (N=17)	1 (6%)	10 (59%)	6 (35%)	17 (100%)

As indicated in Table 2 above, the majority of teachers (76%), SPC heads (65%) and school principals (59%) have responded that teachers prepare instructional materials some times. In the same manner, 16% of teachers, 35% of SPC heads and 35% of school principals replied that teachers rarely prepare instructional materials. The remaining 8% of the teachers and 6% of the school principals have reported that teachers always prepare instructional materials in their lessons, but none of the SPC heads confirmed this idea. Hence, the result in Table 2 tells that the majority of teachers, SPC heads and school principles agreed that teachers do not frequently prepare instructional materials in their lessons.

In a similar manner, the respondents were asked to indicate the frequency of utilization of instructional materials by teachers. More or less, similar results were observed with that of preparation.

Table 3 Frequency of Utilization of Instructional Materials by Teachers

Respondents	<i>Frequency of Utilization</i>			
	Always	Same times	Rarely	Total
Teachers (N=196)	12 (6%)	130 (66%)	54 (28%)	196 (100%)
SPC Heads (N=17)		10 (59)	7 (41%)	17 (100%)
School principals (N=17)	1 (6%)	11 (65%)	5 (29%)	17 (100%)

In table 3 above, 66% of the teachers, 59% of the SPC heads and 65% of school principals have responded that teachers sometimes utilize instructional material. In line with this, 28% of the teachers, 41% of the SPC heads and 29% of school principal have admitted that they rarely provided their students with such instructional materials. From the results above, it is observed that the majority of teachers, SPC Heads and school principals agreed that teachers do not frequently utilize instructional materials in their lessons.

The two results indicated in Table 2 and Table 3, were supplemented by results obtained from observation and interviews held with PCU heads. From the follow up sheet in the SPCs, the researcher observed that most of the teachers did not visit the SPCs frequently. Similarly, the discussion held with PCU heads showed that teachers do not frequently prepare and Utilize instructional materials. All these results revealed that the majority of teachers do not prepare and use instructional materials as expected of them.

4.2 Demographic Characteristics of the Respondents

In this study, 196 teachers, 17 primary school principals, 17 SPC heads and 4 heads of pedagogical centers unit at Woreda level were involved. In order to see how competent the respondents were to generate the relevant information to the study, their gender, ages, years of experience and educational qualification were investigated. As the result of the investigation revealed, most of the participants are adequately qualified and had long experiences in their respective jobs. More details are indicated in the following consecutive tables.

Table 4 Gender of the respondents

Respondents	Gender		
	M	F	Total
Teachers (N=196)	121 (62%)	75 (38%)	196 (100%)
School Principals (N=17)	17 (100%)	—	17 (100%)
SPC Heads (N=17)	16 (94%)	1(6%)	17 (100%)
PCU Heads (N=4)	4 (100%)	—	4 (100%)

With respect to the sex of the respondents, 62% of the teachers, 100% of the school principals, 94% of the SPC heads and 100% of the heads of Pedagogical Center Unit at Woreda level were males. This shows how the school system in the zone is very much male oriented at the primary level. It also seems similar to other zones in the region. Therefore, great attention has to be paid to the female participation.

Table 5. Ages of the respondents

Respondents	Ages in Years			
	20-30	31-40	41-50	Total
Teachers (N=196)	61 (31%)	88 (45%)	47(24%)	196(100%)
School Principals (N=17)	2 (12%)	9 (53%)	6 (35%)	17 (100%)
SPC Heads (N=17)	3 (18%)	6(35%)	8(47%)	17(100%)
PCU Heads (N=4)		1 (25%)	3 (75%)	4 (100%)

Regarding the age of the respondents, 45% of the teachers, 53% of the school principals, 35% of SPC heads and 25% of heads of PCU at Woreda level were between 31 and 40 years. Furthermore, 24% of the teachers, 35% of the school principals, 47% of SPC heads and 75% of the PCU at Woreda level were between 41 and 50 years. The rest were between 20 and 30 years.

What is surprising in this result is that majority of SPC Heads are 41-50 years old. This goes in line with what the researcher heard from the PCU Heads during discussion. They said:

SPCs Heads are assigned to that job not because they are competent enough, but simply to release them from high teaching load.

Regarding the experience of the respondents in their respective jobs, majority of the teachers have 11-20 years of experience. Although most of school principals and SPCs Heads had more years in the teaching profession, majority of them have 1-10 years of experience in their current jobs. The following table shows the details.

Table 6. years of experience in the current jobs

Respondents	Years of Experience			
	1-10	11-20	21-30	Total
Teachers (N=196)	50 (26%)	93 (47%)	53 (27%)	196 (100%)
School Principals (N=17)	12 (71%)	5 (29%)	—	17 (100%)
SPC Heads (N=17)	11 (65%)	6 (35%)		17 (100%)
PCU Heads (N=4)		1 (25%)	3 (75%)	

Pertaining to the experience of the respondents in their respective jobs, 47% of the teachers, 29% of the school principals, 35% of the SPC heads and only 25% of the heads of PCU at Woreda level were between 11 and 20 years, while 27% of the teachers and 75% of the heads of PCU at Woreda level were between 21 and 30 years. Moreover, 21% of the teachers, 71% of the school principals and 65% of SPC Heads were between 1 and 10 years.

Pertaining to the educational background of the respondents, almost all of them had

a 12 + TTI qualification. Let us see the following table.

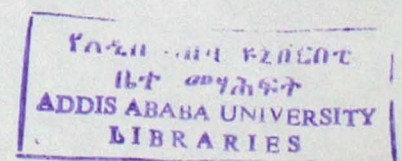


Table 7. Educational background of the respondents

Respondents	Educational Qualification			
	12+TTI	10+TTI	Below TTI	Total
Teachers (N=196)	177(90%)	14 (7%)	5 (3%)	196 (100%)
School Principals (N=17)	17 (100%)			17 (100%)
SPC Heads (N=17)	17 (100%)			17 (100%)
PCU Heads (N=4)	4 (100%)	1 (25%)	3 (75%)	4 (100%)

To the educational background of the respondents, 90% of the teachers, 100% of the school principals, 100% of SPC heads and 100% of PCU heads at Woreda level had a 12+TTI certificate. More over, 7% and 3% of the teachers had a 10+TTI certificate and below TTI level respectively.

As indicated in tables above, results showed that the majority of the respondents had a 12+TTI qualification, and furthermore, most of them had long experiences in their respective jobs which might enable them to generate the relevant information to the study.

4.3 The Adequacy of Teachers' and SPC Heads' Training

Pre-service and in-service training of teachers and media coordinators on media skills is very important in instruction. With this regard, teachers and SPC Heads were asked two questions, whether or not they have had training on media, and if they had, duration of their training. Similarly, PCU Heads were asked about the status of teachers' and SPC Heads' training on media. As results revealed, except the formal training they have had only for a couple of weeks, they did not have a special training on media. The following two tables indicate the result.

Table 8. The Training status of Teachers and SPC Heads

Respondents	Responses		
	Yes	No	Total
Teachers (N=196)	105 (54%)	196 (46%)	196 (100%)
SPC Heads (N=17)	7 (41%)	10 (59%)	17 (100%)

As can be seen from the table above, 54% of the teachers and 41% of the SPC heads responded that they had some training on preparing and utilizing instructional materials, while 46% of teachers and 59% of SPC heads said that they did not have trainings. This result was supplemented by pedagogical center unit heads at Woreda level. They confirmed the idea by saying that teachers and SPC heads did not have adequate training on media.

Those who have said that they had some training were again asked for the duration of their training period.

Table 9. Duration of Training

Respondents	Responses			
	Less than a week	For a week	2 and more weeks	Total
Teachers (N=105)	37 (35%)	44(42%)	24 (23%)	105 (100%)
SPC Heads (N=7)	2 (29%)	2 (29%)	3 (42%)	7 (100%)

Out of 105 teachers and 7 SPCs heads who had responded that they had some training, 77% of teachers and 58% of SPC heads had the training for a week or less period of time, while 23% of teachers and 42% of SPC heads had the training for 2 or more weeks.

Hence, this shows that the majority of the SPC heads and teachers did not have special training on instructional materials and even those who had reported to have special training were not sufficiently trained. Furthermore, all of heads of pedagogical center unit at woreda level have pointed out that teachers and SPC

heads were not adequately trained. Indeed , the inadequacy of training was also indicated by Berhane (1999) as a serious problem in running SPCs of Mekele Zone. The similarities in the results of these research undertakings seem to indicate that inadequacy of training is a common problem.

4.4 Problems in Preparing and Using Instructional Materials .

Teachers, SPC heads and School Principals were asked whether or not they face any problem in preparing and utilizing instructional materials. According to the results, majority of the respondents reported that they face problems in preparing and using instructional materials. The following table shows the result.

Table 10 Problems in preparing and using instructional materials

Category of the respondents	Responses		
	Yes	No	Total
Teachers (N=196)	187(95%)	9 (5%)	196 (100%)
SPC Heads (N=17)	14 (82%)	3 (18%)	17 (100%)
School principals (N=17)	15 (88%)	2(12%)	17(100%)

As has been depicted on Table 10, most of the teachers (95%), the SPC heads (82%) and school principals (88%) responded that they face problems in preparing and utilizing instructional media. On the other hand, only 5% of the teachers, 18% of the SPC heads and 12% of school principals have replied that they do not face any problem in preparing and using instructional materials. Thus, according to Table 10 above, most of teachers, SPC heads and school principals agreed that they face problems in preparing and using instructional materials.

Furthermore, teachers, SPC Heads and School Principals were asked to rank major problems in media production and utilization from the highest to the lowest.

Similarly, PCU heads were asked to provide their opinion. The result revealed that lack of financial and material support and inadequacy of training were the major problems. The following table indicates the evidence.

Table 11. Major problems in producing and using media

Respondents	Major Problems Lack of:				Total
	Time	Interest	Training	Finance & material	
Teachers (N:196)	4 (2%)	3(2%)	81(41%)	108 (55%)	196 (100%)
SPC Heads (N:17)	1 (6%)	–	6 (35%)	10 (35%)	17 (100%)
School principals (N:17)	–	1(6%)	4 (24%)	12 (24%)	17(100%)

Table 11 reveals that 55% of the teachers, 59% of the SPC heads and 70% of the school principals responded that lack of financial and material support is the first major problem in preparing and using instructional materials. Similarly, 41% of teachers, 35% of SPC heads and 24% of school principals responded the inadequacy of training to be the major problem. On the other hand, only 4% of the teachers, 6% of the SPC heads and 6% of school principals considered lack of time, teachers interest and the like to be major problems. Hence, it is obvious that lack of financial and material support and inadequacy of training are the first and second serious problems accountable for the low performance of school pedagogical centers, while lack of teachers' interest and lack of time are the two least serious problems in preparing and using instructional media.

4.5 Participation of Teachers and SPC Heads in workshops or seminars

According to Betsate (2000), in-service training in the form of workshops or seminars, is essential to raise the media-related competency of the practitioners. Regarding this point, teachers and SPC heads were asked whether or not they have ever participated in any type of medial-related workshops or seminars.

Tables 12 and 13 and the subsequent discussion deal with this.

Table 12. Participation in workshops or seminars

Participants	Participation		
	Yes	No	Total
Teachers (N=196)	76 (39%)	120 (61%)	196 (100%)
SPC Heads (N=17)	8 (47%)	9 (53%)	17 (100%)

Those respondents who have replied that they participated in workshops or seminars were again asked for the extent (level) of participation.

Table 13. Level of participation in workshops or seminars

Participants	Level of Participation			
	For less than a week	For a week	For two weeks or more	Total
Teachers (N=76)	41 (54%)	29 (38%)	6 (8%)	76 (100%)
SPC Heads (N=8)	4 (50)	1 (13%)	3 (37%)	8 (100%)

As indicated in Table 12 and 13, questions have been raised to teachers and school pedagogical centers heads whether or not they have ever participated in workshops or seminars regarding instructional media. Unfortunately, 61% of teachers' responses and 53% of SPC heads' responses have been found to be not. On the other hand, 39% of the teachers and 47% of SPC heads responded that more or less they have participated in workshops or seminars. However, out of those teachers and SPC heads, who have participated in workshops or seminars, 54% of teachers and 50% of SPC heads said that they have participated in workshops or seminars for a period of less than a week and only 8% of teachers and 37% SPC heads participated for two weeks or more. Thus, as we can see from the two tables above, most of the sample teachers and SPC heads have not ever participated in the seminars or workshops and those who had participated have evaluated their participation to be not sufficient.

4.6 The contribution of SPCs in facilitating the teaching –learning process.

In school of any level, instructional materials are kept in pedagogical centers which are resource centers that enrich the teaching learning and enhance student learning. Furthermore, according to Brown J. et al .(1977), educational media centers are regarded as laboratories-places where students pursue a full variety of learning experience. To this point, teachers, SPC heads and school principals were asked to forward their opinion on the contribution of SPCs in facilitating instruction. The table below indicates the result.

Table 14. the contribution of SPCs in instruction

Respondents	Level of contribution			
	Sufficient	Fair	Poor	Total
Teachers (N=196)	73 (37%)	64 (33%)	59 (8%)	196 (100%)
SPC Heads (N=17)	4(24%)	6(35%)	7 (41%)	17 (100%)
School Principals (N=17)	7 (41%)	6 (35%)	4 (24%)	17 (100%)

As it is indicated in Table 14, the majority of teachers (63%), SPC Head (76%) and school principals (59%) of the target school have responded that the contribution of their respective school pedagogical centers in facilitating instruction was fair or poor, while 37% of teachers, 24% of SPC heads and 41% of school principals said that the SPC's contribution was more or less sufficient. This implies that most of the SPCs in the sample schools do not sufficiently facilitate the teaching, learning process.

4.7 The contribution of school principals in supporting SPCs

As mentioned earlier in the Review of literature, the school principals' full support for the entire program of media services is fundamental to the success of teachers and media personnel. However, such success can be obtained mostly by the principals' dedication, commitment and a positive attitude towards his

profession, his knowledge and skill competencies. To this point, teachers and SPC heads were asked to point out their opinion regarding some expected activities of school principals. Similarly, SPCs were observed for the existence of supervision mechanism by principals and interviews were conducted with PCU heads. The evidences obtained show that most of the school principals were not performing what was expected of them. This is reflected in the following table.

Table 15. Contribution of school principals in supporting SPCs

Respondents	Opinions from Respondents			
	High	Average	Low	Total
Teachers (N=196)	73 (37%)	64 (33%)	59 (8%)	196 (100%)
SPC Heads (N=17)	4(24%)	6(35%)	7 (41%)	17 (100%)

As indicated in Table 15, only 2% of the teachers and 6% of SPC heads reported that their respective school principals have highly supported their SPCs, while more than 75% of teachers and 70% of SPC heads responded that the contribution of school principals in supporting SPCs was below average.

Similarly, results from institutional observation and discussion revealed that teachers were not satisfactorily supervised by principals and also were not offered incentives for their active participation in preparing and using instructional materials.

Therefore, based on the results of teachers' and SPC heads' responses, observation of SPCs and discussion made with heads of pedagogical center unit at Woreda level, it seems reasonable to argue that activities expected from the school principals regarding instructional materials were not sufficiently performed.

4.8. Budget allocation for the purpose of SPC

The production of instructional materials requires financial and material allocation to the activities performed in the school pedagogical center. This means,

schools should allocate enough amount of budget for the purpose of instructional media. In this regard, data were gathered from teachers, SPC heads and school principals through questionnaires, the target schools were observed for their annual budget allocation and 4 experts in Woreda Education offices that were heads of pedagogical center unit (PCU) at Woreda level were interviewed. Results in the following table may show the actual condition.

Table16. Adequacy of Budget allocation for SPCs

Respondents	Adequacy of Budget Allocation			
	Average	Low	Not allocated	Total
Teachers (N=196)	11 (6%)	124 (63%)	61 (31%)	196 (100%)
SPC Heads (N=17)	3 (18%)	9 (53%)	5 (29%)	17 (100%)
School Principals (N=17)	2 (12%)	11(65%)	4 (23%)	17 (100%)

As has been depicted in Table 16, the majority of teachers (63%), of SPC heads (53%) and of school principals (65%) have answered that the annual budget allocated for their respective school pedagogical centers was low. Moreover, 31% of the teachers, 29 of the SPC heads and nearly 23% of the school principals have said that there was no independent budget allocation for their respective SPCs. Furthermore, all of PCU heads have confirmed the same idea by saying:

There is no financial and material support for SPCs from zone or woreda education offices or any other sources.

This goes in line with the result of observation which disclosed the insignificant budget for SPCs, and the only source of the support, if any, to be their respective schools. Thus, according to the majority of the respondents, the budget for school media centers was insignificant or none.

4.9. The presence of collaborative work among the teaching staff and the community members around the school.

As it is noted in Carlton and Erickson (1968), instruction is a social process which requires the collaborative work among the working staff. This means that school staff, including the community around the school, should work cooperatively to have effective teaching-learning process.

Moreover, the community in which a school exists constitutes valuable educational facilities that can be obtained from different sources such as government and non -government organizations, parents, resource persons, etc. In order to have effective teaching-learning process, it is recommendable that teachers become as familiar as they can with the resources that surround their school. To this point, teachers and SPC heads were asked to forward their opinion to the collaborative work among the teaching staff and involvement of resource persons.

Table 17. Collaboration between teaching staff

Respondents	Responses			
	High	Average	Low	Total
Teachers (N=196)	3 (2%)	106 (54%)	87 (44%)	196 (100%)
SPC Heads (N=17)	1 (6%)	10 (59%)	6 (35%)	17 (100%)

The result in Table 17 reveals that among the respondents, 54% of the teachers and 59% of the SPC heads have evaluated their co-operative work to be average, while 44% of the teachers and 35% of the SPC heads responded that the collaborative work among the teaching staff was low. More over, institutional observation and discussion held with some respondents indicated that experience sharing among teaching staff and inviting resource persons among the community members was less practical.

As a result, the community resource that are valuable in instructional process were not successfully exploited. Hence, the teaching-learning process in the target schools' staff was not highly collaborative.

4.10 Availability of media-related guide materials

Media-related reference materials would help teachers to develop their knowledge and skills in the preparation and utilization of instructional materials. In this regard, an attempt was made to obtain evidences whether or not the target SPCs have got such policy document. Three data gathering instruments were used. Questionnaires to teachers, SPC heads and school principals, the target SPCs were observed and discussions with heads of pedagogical center unit at woreda level were made. The following table shows the result.

Table 18. Availability of guide materials.

Respondents	Availability of guide materials		
	Yes	No	Total
Teachers (N=196)	91 (46%)	105 (54%)	196 (100%)
SPC heads (N= 17)	7 (41%)	10 (59%)	17 (100%)
School principals (N =17)	8 (47%)	9 (53%)	17 (100%)

As results revealed, 54% of the teachers, 59% of the SPC heads and 53% of the school principals responded to this question in the negative, while 46% of the teachers, 41% of the SPC heads and 47% of the school principals have said that they had a guide material in their respective SPCs.

On the other hand, all of the PCU heads at Woreda level agreed about the presence of guide materials, but they said that they were not quite sure whether

the guide materials were forgotten in the store, owned privately or handed over to the SPC heads.

Further more, the researcher observed that out of 17 SPC s, 9 (53%) were found to have a recently issued media-related guide material which was adopted by the Regional Education Bureau in 1999.

On the same time, the researcher has also observed other three schools, which were found to have the aforementioned document in their stores whose presence was not known by their respective SPC heads and teachers. This result shows that schools lack the controlling mechanisms of what they have and do not have. More over, almost all of the SPC heads were observed to have no initiative to find out any necessary materials unless they were requested by self-initiated teachers.

To sum up, there were some efforts by Regional Education Bureau to produce and provide more or less necessary media-related documents, but Woreda Education offices and schools had poor mechanisms regarding distributing, controlling and storing media related guides.

4.11 Responsibilities of Heads of SPCs.

As clearly stated in the review of literature, a school pedagogical center requires a well competent coordinator so as to support greatly the realization of the educational objectives. At the same time, the school pedagogical center head is expected to help teachers in selecting, producing and using instructional materials in their teaching-learning process. Concerning the responsibilities of heads of school pedagogical centers, teachers and school principals were asked whether or not their respective SPC heads performed the activities expected of them.

To supplement the information obtained through questionnaires, a structured observation checklist and interview for 4 pedagogical center unit heads at Woreda level were used to collect data.

Table 19. Responsibilities of Heads of SPCs

Respondents	Activities performed by SPC heads			
	Always	Sometimes	Not at all	Total
Teachers (N= 196)	49 (25%)	68 (35%)	79 (40%)	196 (100%)
School principals (N=17)	4 (24%)	6 (35%)	7 (41%)	17 (100%)

As the results revealed, only 25% of teachers and 24% of school principals have agreed that their respective SPC heads perform the activities expected of them always, while the majority of the respondents, 75% of teachers and 76% of school principals indicated that SPC heads performed their activities sometimes or none.

In a similar manner, the researcher has observed that the conditions of SPCs, classification system of materials produced, filling and preservation system, etc. were not encouraging. Similarly, based on the discussions with the heads of pedagogical center unit (PCU) at woreda level, most of SPC coordinators were assigned to that job not because of their training status or competency, but simply because of teachers' request and as a result, to decrease the teaching load. Moreover, the respondents disclosed that the teachers' request to be assigned in the SPCs is increased with their ages and increased number of service years.

In general, the four PCU heads were observed and heard saying that there was low performance in school activities concerning instructional media, and

they themselves were not performing the activities expected of them. Thus, from the discussions above, it is reasonable to argue that SPC heads did not adequately perform the expected activities.

CHAPTR FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

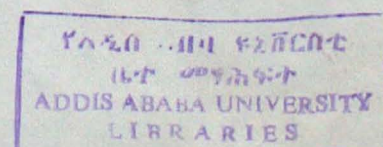
In the previous chapter, an attempt was made to present, analyze and discuss the major observations made in this research venture. This chapter summarizes the most popular findings and makes conclusions, upon which recommendations for future interventions are based.

5.1 Summary

As it is mentioned in the review of literature, effective preparation and utilization of instructional media depends upon the adequacy of teachers' training. However, as indicated in Table 8, 46% of the teacher respondents said that they did not have adequate training during their stay in the teacher training institute. Moreover, as indicated in Table 12, 61% of teacher responded that they did not participate in any workshops or seminars regarding instructional media. Thus, it appears that most of the teachers were without adequate training in instructional technology.

As to SPC heads, the majority of them did not have special training on instructional materials. Further more, 53% of the SPC heads have responded that they have not ever participated in the workshops or seminars concerning instructional media. Hence, this shows that the majority of SPC heads were not sufficiently trained.

With regard to the frequency of preparation and utilization, the findings indicated that the majority of teachers, SPC heads and school principals and



observation to the target SPCs showed that teachers do not frequently prepare and use instructional materials in their lessons. Moreover, Lack of financial and material support and inadequacy of training were considered to be the first and second serious problems accountable for the low performance of school pedagogical centers.

As stated by Berhane (1999), school principals are key personnel in the successful implementation of educational programmes. However, as revealed on the results of teachers and SPC heads responses, observation of SPCs and discussion made with heads of pedagogical center unit at woreda level, the activities expected from the school principals regarding instructional media were not adequately performed.

The production of instructional materials requires financial and material allocation. However, as has been revealed in the results, the majority of teachers (63%), of SPC heads (53%) and of school principals (47%) have pointed out that the annual budget allocated for their respective school pedagogical centers was insignificant. Furthermore, it was found out that there was no financial and material support from Zonal or Woreda Education offices or any other sources. The only source of support, if any, was considered to be the schools.

According to Brown J. et . al (1977), school medial centers are regarded as places where students pursue a full variety of learning experiences and as a result, they improve instruction. Nevertheless, the majority of the respondents said that the contribution of school pedagogical centers in facilitating teaching - learning process was moderate or below. Moreover, most of the SPCs were observed to be poorly organized and some schools without separate rooms as pedagogical centers. Thus, most of school pedagogical centers do not satisfactorily facilitate the instructional process.

Since instruction is a social process, school principals, teachers, media coordinators and the whole school staff, including the community around the school should work cooperatively to have effective teaching-learning process. However, majority of the respondents have said that the cooperative work of teaching staff to be average. Nevertheless, most of the teachers and the SPC heads indicated that they have not ever invited community members to share their experiences in their instructional process. As a result, the community resources that are valuable in instructional process were not successfully exploited. Hence, the teaching-learning process in the target schools' staff was not highly cooperative.

Regarding the availability of media-related material on how to prepare and use instructional materials, 54% of the teachers, 59% of the SPC heads and 53% of the school principals responded that the guide material was not available. On the contrary, by discussion with the heads of pedagogical center unit at Woreda level and visiting the schools, it was observed that 13 schools out of 17 had recently issued media-related guide material scattered in the SPCs and store. To this point, the researcher has observed that there were some efforts by Regional Education Bureau to produce and provide more or less necessary media-related documents, but they lack the mechanisms of distributing, controlling and the inventory process.

School pedagogical center heads are expected to help teachers in selecting, producing and using instructional materials in their teaching-learning process. However, the majority of the respondents indicated that SPC heads performed their activities sometimes or not at all. On the other hand, the discussion with the heads of pedagogical center unit at Woreda level revealed that the SPC coordinators were assigned to that job not because of their training status or competency, but simply to reduce the teaching load. Hence, the expected activities of the SPC heads were not adequately performed.

With regard to teachers interest and attitude towards instructional materials, the result presented in Table 11 revealed that lack of teachers interest towards

instructional materials was not serious problem in preparing and using instructional materials. Hence, the result indicated that teachers expressed more or less favorable attitude towards instructional media.

5.2 Conclusions

In the light of the major findings, the following conclusions were drawn.

1. In order to have effective preparation and utilization of instructional media, teachers must have knowledge and skills that can be obtained through pre and in-service training and participating in various workshops and seminars. However, the result of this study revealed that the majority of teachers in primary schools of Wolaytta Zone were without adequate training. Hence, we can conclude that teachers lack the necessary knowledge and skills due to inadequacy of training.

2. As to heads of SPCs, most of them were assigned to pedagogical centers without any special training, and moreover, they did not get any capacity building through in-service workshops and seminars. Hence, they failed to accomplish most of the activities that were expected of them. This leads us to conclude that the training status of the heads of school pedagogical centers of the target schools was unsatisfactory.

3. Regarding the frequency of preparing and using instructional materials, teachers did not frequently prepare and use instructional media mostly due to lack of financial and material support and inadequacy of training. Therefore, it is reasonable to conclude that no necessary effort was made to support SPCs financially and by materials.

4. Pertaining to the responsibilities of school principals, the activities expected of them regarding instructional media were not adequately performed.

Thus, it can be concluded that school pedagogical centers were not sufficiently facilitated and provided the necessary support by the school principals.

5. Regarding teachers' attitude, the result indicated that teachers have more or less favorable attitude towards instructional materials. Hence, it is reasonable to conclude that lack of interest is not the major problem in preparing and utilizing instructional media.

6. Some research findings showed that there was no any guide material in SPCs on how to prepare and use instructional materials. On the contrary, the researcher has observed that there were some media-related guide materials on media production and use produced by Regional Education Bureau. But, schools and Education offices of different levels lack the distributing and controlling mechanisms of such documents.

7. Regarding the cooperative work, the respondents seem to be satisfied with the existing cooperation among the teaching staff, while the coordination among the SPCs and the community resources was observed to be poor. Hence, the community involvement in the instructional process was below expectation.

8. With regard to the sources of financial and material support to the SPCs, there was no any significant support from Education offices, NGOs or the community. Thus, it is reasonable to conclude that schools in general, and school pedagogical centers in particular, did not get the necessary support from the concerned bodies.

5.3 Recommendations

Based on the information collected pertaining to the factors that can either foster or hinder the effective preparation and utilization of instructional materials, the following suggestions were forwarded.

1. In order to improve the teaching-learning process, as it is stated in Education and Training Policy, ETP (1994), teachers are required to have the necessary teaching qualification and competency in the media of instruction, through pre-service and in-service training. Based on this point, it could be indispensable to prepare comfortable atmosphere and favorable conditions in schools and different educational institutions. School pedagogical centers are one of these basic conditions that are to be established and organized in such a way that they can be used as centers for training, exhibitions, research works, places where schools share experiences, produce modern teaching materials and introduce modern technologies.

However, the result of this study revealed that the majority of teachers did not get adequate training on media. Therefore, besides investigating the emphasis given to instructional media in the contents of the teacher training curriculum, in-service training, in the form of workshops and seminars should be encouraged to upgrade the capacity of teachers.

2. Regarding heads of SPCs, most of them were assigned to pedagogical centers without any special training. Therefore, the concerned bodies in all levels of education offices in general, and the department of educational support in

particular, are required to arrange short term training programs, supplementary workshops, seminars and the like.

3. As it is mentioned earlier, school principals are responsible for many of the major achievements or weaknesses observed in their respective schools. However, as it is evidenced in the study, the activities expected of them regarding instructional materials were not adequately performed. In other words, they were not competent enough in accomplishing their activities, carry out responsibilities, accountabilities and commitment. Therefore, they should be equipped with the necessary knowledge and skills through in service and on-job training, workshops or seminars. Further more, necessary support should be provided from education offices and at the same time, they have to be supervised with incentives and have to be criticized for their poor performance.

4. Without sources of raw materials and reasonable amount of budget allocated to a job, it is difficult to perform duties and attain responsibilities at any level. Concerning the provision of financial and material support to schools in general, and SPCs in particular, the result of this study showed that there was no any significant support from education offices, NGOs, or the community. Furthermore, the responsibilities given to the community by the Education and Training Policy seems to be not clearly understood.

Therefore, education offices at different levels are required to allocate budget for the activities performed in the school pedagogical centers, moreover, the Regional Education Bureau has to produce a clear guide line based on the Education and Training Policy, that may create coordinative activities among the community, NGOs working in the social sectors and schools.

5. The educational support department at Regional level is responsible to make pedagogical centers functional. Nevertheless, the result of this study indicated that these pedagogical centers at different levels did not adequately perform their

activities, and also pedagogical center unit at Woreda, Zonal and Regional levels were observed to be inactive.

Therefore, the Regional Education Bureau has to create a mechanism to mobilize pedagogical center units at different levels to support school pedagogical centers professionally, financially and by materials and equipment.

6. Teachers and SPC heads are required to call up the local community members who had technical skills to share their experiences to support instructional process. However, the majority of the respondents had never invited such community members to their classes. Hence, schools management should create fertile ground for such activities, and also teachers and SPC heads should be supervised whether or not they perform such activities.

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APPEDIX -A

Questionnaire for primary (1-4) School Teachers

This questionnaire is designed to collect relevant information about factors affecting the preparation and utilization of visual instructional materials in the first cycle (1-4) primary schools of Wolaytta zone. Since the success of the study depends upon your genuine information, you are kindly requested to respond honestly and thoughtfully. The information you give will be used for statistical purposes and the confidentiality of sources will be strictly maintained. You are not required to write your name.

Thank you for
Your cooperation

PART ONE

Directions:- please, indicate your choice by encircling one of the letters of the options, or write the answer for those which require written answers in each of the following sentences.

1. Name of the school _____
2. Sex _____
3. Age _____
4. Number of years of experience in the teaching profession _____
5. Educational qualification _____
6. Have you had training on preparing and utilizing visual instructional materials during your stay in the TTI? A) yes B) No
7. If your answer to question number 6 is "yes" then how do you evaluate the training?
 - a. adequate b. moderate c. fair d. poor

8. How frequently do you prepare instructional materials?
 A) always B) sometimes C) rarely D) never
9. How frequently do you use instructional materials?
 a) always b) sometimes c) rarely d) never
10. do you face any problem in preparing and using visual instructional materials?
 a) Yes b) No
11. If your answer to question No 10 is "yes" then which of the following do you think to be an acute problem in your school? indicate your choice by ranking them from the highest to the lowest.
- a. inadequacy of training b. lack of time c. lack of equipment
- d. lack of financial and material support
- e. lack of interest
12. Have you ever participated in seminars or workshops regarding instructional materials?
 a. Yes b. No
13. If your answer to question No. 13 is "yes", then for how long have you participated?
- a. for 2 days d. for 2 weeks
- b. for 3 days e. for a month
- c. for a week f. for 2 months
14. How do you evaluate the contribution of the seminars or workshops you have participated in? a) high b) average c) fair
- d) low
15. How do you evaluate the contribution of school pedagogical center in facilitating the teaching-learning process?
 a) enough b) moderate c) fair d) poor e) no use at all

16. Have you ever invited community members who have technical skills in instructional materials in order to assist in preparing and using instructional materials?
a) yes b) No
17. How do you evaluate the contribution of your school principal to support the pedagogical center? a) high b) average c) fair d) low e) not at all
18. The annual budget allocated for school pedagogical center in your school is:
a) enough b) moderate c) fair d) low e) not allocated at all
19. How do you evaluate the collaboration between teachers and the head of the school pedagogical center?
a) high b) average c) fair d) low e) not at all
20. Do you have a guide material in your school on how to prepare and use instructional media? A) Yes B) No
21. If your answer to question No 21. is "No" why?
22. Is there any financial and material support for your school pedagogical center?
A) Yes B) No
23. Of the answer to question No. 23 is "yes" then what is the source of the support?
A) zonal or woreda Education Bureall B) The community C) NGO D) the school E)All

PART TWO

Directions:- Please indicate your degree of agreement using a tick mark (✓) to each of the following statements concerning visual instructional materials.

- Key SA = Strongly Agree
 A = Agree
 UD = Undecided
 DA= Disagree
 SDA: Strongly Disagree

No.	Item	Alternatives				
		SA	A	UD	DA	SDA
1	Instructional materials provide concrete experiences					
2	Instructional materials provide direct interaction of students with the reality of social and physical environment.					
3	Instructional materials attract students' interest in learning					
4	Instructional materials do not facilitate active learning, rather it is a wastage of time and resource when attempting to use them.					

PART THREE

Directions:- Indicate your agreement using a tick mark (✓) for each of the following sentences concerning the activities of SPC's Head

No.	Activities	Alternatives		
		Yes	Sometimes	No
1	SPC's head assists teachers in selecting appropriate instructional materials			
2	SPC's head gives orientation to students regarding instructional materials.			
3	He or she prepares necessary instructional materials that are ordered by teachers			
4	He or she gives workshops or seminars to teachers on instructional materials			
5	SPC's head arranges programmes or working hours for teachers and students use in the pedagogical center.			
6	He or she assesses the problems of teachers on instructional materials and reports to the concerned bodies			
7	SPC's head preserves the instructional materials in a proper manner in the pedagogical center for future use.			

PART FOUR

Directions:- indicate your agreement using a tick mark (✓) for each of the following sentences that are provided in the table regarding principals activities.

No.	Activities	Alternatives		
		Yes	Sometimes	No
1	School principal makes the necessary effort to allocate enough amount of budget for the purpose of instructional materials			
2	School principal supervises the utilization of instructional materials by teachers in the class room.			
3	School principal assesses the problems of teachers in preparing and using instructional materials and provides immediate solution.			
4	School principal offers incentives to those teachers who are actively participating in using instructional materials.			
5	School principal plans and arranges seminars or workshops for the teaching staff			
6	School principal gives relevant advice to teachers on how to prepare and utilize instructional materials.			
7	School principal encourages discussion on instructional materials at staff meetings.			

APPEBDIX - B

Questionnaire for Heads of Pedagogical centers at Primary (1-4) school level.

This questionnaire is formulated to collect necessary information about factors affecting the preparation and utilization of visual instructional materials in the first cycle (1-4) primary schools of Wolaytta zone. Since the success of the study depends upon your genuine information, you are kindly requested to respond honestly and thoughtfully. The information you give will be used for statistical purposes and the confidentiality of sources will be strictly maintained. You are not required to write your name.

Thank you for
Your cooperation

PART ONE

Directions:- please, indicate your choice by encircling one of the letters of the alternatives, or write the answers for those which require written answers in each of the following statements.

1. Name of the school _____
2. Sex _____
3. Age _____
4. Number of years of experience in the teaching profession _____
5. Qualification _____
6. Service in years as head of the pedagogical center _____
7. Have you had special training on Instructional materials?
A) Yes B) No

8. If your answer to question number 7 is "Yes", then for how long?
- a) for 2 days
 - b) for 3 days
 - c) for a week
 - d) for 2 weeks
 - e) for a month
 - f) for 2 months
 - g) if you have different answer please specify _____
9. Do you face any problem in preparing and utilizing visual instructional materials?
- A) Yes B) No
10. If your choice in question No. 9 is "Yes", what reason do you suggest for this?
- a. lack of financial and material support?
 - b. Shortage of time
 - c. Lack of adequate training
 - d. Shortage of materials and equipment.
 - d. If any other, specify _____
11. Which of the following do you accept to be an acute problem in your school?
- Rank your indication from the highest to the lowest.
- a. lack of teachers' interest to use the materials
 - b. lack of material resources
 - c. shortage of finance
 - d. shortage of equipment
 - e. lack of time
 - f. If any other, specify _____
12. Is there any financial and material support for your school pedagogical center?
- a) Yes b) No
13. If your answer to question No. 12 is "Yes", then what is the source of the support?
- a) Zonal or Woreda Education Bureau
 - b) The community
 - c) Non-governmental agencies

d) The school

e) All

f) If any Other, specify _____

14. The amount of annual budget allocated for the school pedagogical center (SPC) is:

a) enough d) low

b) moderate e) none

c) fair

15. Does your pedagogical center have a guide material on how to prepare and use instructional materials? A) Yes B) No

16. The contribution of the school pedagogical center (SPC) in facilitating the teaching-learning process is:

a) sufficient b) moderate c) fair d) poor e) no

use at all

17. Have you ever participated in workshops or seminars regarding instructional media?

a) Yes b) No

18. If your answer to question No. 17 is "Yes", for how long?

a. for two days b. for three days c. for a week

d. for two weeks e. for a month

19. Is there any support from the pedagogical center at Zonal or Woreda-level) ?

A. Yes B) No

20. If the answer to question No. 19 is "Yes", the amount of support obtained is:

a) high b) average c) fair d) poor

21. How do you evaluate the contribution of the seminar or workshop you have participated in?

a) high b) average c) fair d) low e) no use at all

22. The contribution of your school principal to support the school pedagogical center
is.
a) high b) average c) fair d) low e) not at all
23. Do teachers prepare and use instructional materials in your school pedagogical center?
a) Yes b) No
24. How do you see the teachers' interest in preparing and utilizing instructional materials?
a) high b) average c) fair d) low e) no interest at all
25. How frequently do teachers prepare instructional materials?
a) always b) sometimes c) rarely d) never
26. Have you ever invited the members of local community who have technical skill to your classroom? A) Yes B) No
27. How do you evaluate the collaboration between teachers and the school pedagogical center's head?
a) high b) average c) fair d) poor e) never at all

PART TWO

Directions: Please, indicate your agreement for each of the following statements that are provided in the table regarding school principals activities. Use a tick mark (✓)

No.	Activities	Alternatives		
		Yes	Sometimes	No
1	School Principal makes the necessary effort to allocate enough amount of budget for the purpose of instructional materials.			
2	School Principal supervises the utilization of instructional materials by teachers in the class room			
3	School Principal assesses the problems of teachers in preparing and using instructional materials and provides immediate solution.			
4	School Principal offers incentives to those teachers who are actively participating in using instructional materials.			
5	School Principal plans and arranges seminars or workshops for the teaching staff			
6	School Principal gives relevant support for the head of school pedagogical center			
7	School Principal encourages discussion on instructional materials at staff meetings.			

APPENDIX - C

Questionnaire for primary (1-4)

School Principals

This questionnaire is designed to collect relevant information about factors affecting the preparation and utilization of visual instructional materials in the first cycle (1-4) primary schools of Wolaytta zone. Since the success of the study depends upon your genuine information, you are kindly requested to respond honestly and thoughtfully. The information you give will be used for statistical purposes and the confidentiality of sources will be strictly maintained. You are not required to write your name.

Thank you for
Your cooperation

PART ONE

Directions:- please, indicate your choice by encircling one of the options, or write the answers for those which require written answers in each of the following sentences.

1. Name of the school _____
2. Sex _____
3. Age _____
4. Number of years of experience in the teaching profession _____
5. Qualification _____
6. Service years as a principal _____
7. Do teachers prepare and use instructional materials ? a. Yes b. No

8. If the answer to question No. 7 is "yes", how do you assess the teachers' interest in preparing and using instructional media?
- a. High b. Average c. Fair d. Low e) no interest at all
9. How do you evaluate the contribution of the pedagogical center in facilitating the teaching- learning process ?
- a. enough b. moderate c. fair
d. poor e) not at all
10. Is there any financial and material support for your school pedagogical center ?
- a. Yes b. No
11. If the answer to question No. 10 is "Yes", what is the source of the support?
- a. Zonal or Woreda Education Bureau
b. The community
c. Non-Government Agencies
d. The school
e. All
f. If any other, specify _____.
12. The amount of annual budget allocated for the school pedagogical center (SPC) is:
- a) enough b) moderate c) fair d) low e) none
13. Is there a trained manpower in your school pedagogical center? a) Yes b) No
14. Does your pedagogical center have a guide material on how to prepare and use instructional materials? A) Yes B) No
15. Which of the following do you accept to be acute problem in your school? Rank your indication from the highest to the lowest.
- a. lack of teachers' interest to use the materials
b. lack of financial and material resources
c. lack of time
d. If any other, specify _____

15. How frequently do teachers participate in school pedagogical center?
 a) always b) sometimes c) rarely d) never
16. Is there any support from the pedagogical center at the Zonal or Woreda level?
 a) Yes b) No
17. How do you see the support given by the Zonal or Woreda Education Bureau?
 a) high b) average c) fair d) poor
 e) none

PART TWO

Directions: Please, indicate your agreement for each of the following statements that are provided in the table below regarding the school pedagogical center head's activities. Use a tick mark (✓)

No.	Activities	Alternatives		
		Yes	Sometimes	No
1	SPC's head assists teachers in selecting appropriate instructional materials.			
2	SPC's head gives orientation to students regarding instructional materials			
3	SPC's head prepares necessary instructional materials that are ordered by teachers			
4	SPC's head gives workshops or seminars to teachers on instructional materials			
5	SPC's head arranges programmes or working hours for teachers and students use in the pedagogical center			
6	SPC's head assesses the problems of teachers on instructional materials and reports to the concerned bodies.			
7	SPC's head preserves the instructional materials in a proper manner in the pedagogical center for future use			

APPENDIX -D
Observation Checklist

1. Name of the school _____
2. Year of establishment _____
3. School's address.
 - a. Zone _____
 - b. Woreda _____
 - c. Kebele _____
4. Is there pedagogical center in the school? Yes _____ No _____
5. If yes, year of establishment _____
3. Annual amount of budget for the purpose of SPC.
4. Availability of instructional materials
 - a) rich b) fair c) poor
8. Types of instructional materials observed in the SPC, their quantity and their condition.

Type	Quantity	Condition

9. Most of the instructional materials are:
 - a. produced at the school pedagogical center
 - b. purchased
 - c. donated
7. Is there a guide material on how to prepare and utilize instructional materials?
Yes _____ No _____
11. Filling system of the instructional materials is:
 - a) very good b) good c) fair d) poor

12. Is there daily and weekly follow up sheet for each teacher in utilization of instructional materials? _____

- If yes, how frequently does each teacher utilize?

13. Is there daily and weekly follow up sheet for teachers in preparation of instructional materials?

- If yes, how frequently does each teacher prepare?

APPENDIX-E

Interview for Heads of pedagogical Center unit at Woreda level

1. Woreda _____
2. Name _____
3. Sex _____
4. Age _____
5. Number of years of experience as head of pedagogical center unit _____
6. Are teachers and school pedagogical center (SPC) heads adequately trained?
7. If your answer to question No.6 is "No", why ? _____
8. Do teachers prepare and use instructional materials in their lesson? _____
9. If your answer to questioner No. 8 is "No", why? _____
10. Do schools have a guide material on how to prepare and use instructional materials ? _____
11. If your answer to question No. 10 is "No" ,why? _____
12. How do you evaluate the collaborative work between teachers, school principals and the heads of school pedagogical center? _____
13. How do you evaluate the financial and material support to schools for the purpose of pedagogical center? _____
14. If your answer to question No 13 is low or below, why? _____
15. How do you evaluate the role of school principals in supervising and offering incentives to those teachers who were superior in preparing and using instructional materials? _____
16. If your answer to question No. 15 is low or below, why? _____
17. How do you evaluate the contribution of pedagogical center unit (PCU) at Woreda and Zonal level to school pedagogical centers? _____
18. If your answer to question No 17 is low or below, why ? _____
19. Who assigns the heads of school pedagogical center and in what criteria?
20. Any more suggestion for further improvement in preparation and utilization of instructional materials _____
