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Teachers' Production and Utilization of Instructional Materials in the Secondary School of Dera Woreda, North Showa, Oromia Regional state

BY

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DECLARATION

I, the under signed, declare that this thesis is my original work and that all sources of material used for the thesis have been duly acknowledged.

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Acronyms

DVD	Digital Visual Disks
IM	Instructional Materials
MOE	Ministry of Education
PC	Pedagogical center
SPC	School Pedagogical Center
TALULAR	Teaching and Learning Using Locally Available Resource
TV	Television
USAID	United State Agency International Development

Abstract

The purpose of this study is to investigate Teachers' production and utilization of instructional materials in the secondary school of Dera woreda, North Showa, Oromiya Regional State. Both quantitative and qualitative data were gatsshered through questionnaire, interviews and observation using checklists. The data were collected from principals (9), teachers (100), students (346) and school pedagogical center facilitators (5). The analysis of the data was made using mean, standard deviation, frequency distribution and percentage. The findings of the study revealed that there is a great problem of teachers' production and utilization of instructional materials in secondary school Dera woreda due to various factors. Although, most of the teachers in the sample schools believed that instructional materials are important for learning purpose, most of them were not properly using the pedagogical centers in their respective subjects. Besides, among the factors that affect the functions of pedagogical centers of schools were: lack of budget and material, trained man power in the centers, lack of the necessary facilities and enough rooms, lack of guide materials to organize and utilize the centers. Therefore, it was recommended that effective management that understands the roles of SPCs and that has commitment to its functions should be in place. Moreover, assigning skilled man power and adequate budget, preparing manuals and guidelines for the frontline practitioners and creating awareness on the functions of the SPCs for students, teachers, school principals and educational experts is crucial.

CHAPTER ONE

INTRODUCTION

This chapter contains the background of the study, statement of the problem, research questions, objectives, significance of the study, delimitation, and definition of terms and organization of the study.

1.1. Background of the Study

Instructional materials are tools that teachers use to implement a particular learning task by enriching the instructional strategy employed. In line with this, Reinhartz (1997:145) argues that instructional materials come in several forms and provide students with a variety of learning experiences that can introduce, explain, reinforce and/ or review concepts presented. Hence, when instructional materials are properly used for the teaching of any subject, the bottom line is that learning will be effective and efficient. That is why it is commonly believed that quality education without the use of instructional materials is unthinkable or may not produce the desired effect.

Using varieties of instructional media is useful to the instructional process. Instructional media are the spice of instructional process. They make the teaching learning process enjoyable, practical, and pleasant (Mortimer, 2003).

Teaching material is the medium of instruction used in the teaching all subjects systematically in the sense of bringing effectiveness in the teaching learning process.

According to RHO (2002) the term teaching aid is generally used to apply materials other than books, magazines and pamphlet. All materials related to school were recognized as teaching aids which are aimed at realizing the objectives and goals of an educational program.

Teaching materials contributes to understand the subject matter they were learning. They also enhance the quality of education, promote learner's knowledge and skills. So it was obvious that the quality of education given in the classroom is determined by the efficient utilization of teaching materials. Utilization of teaching materials in the classroom has become a common practice in secondary schools as it determines quality learning and teaching.

Regarding this DALO (1956) cited in Heinch et.al (1996) said that in the learning process the subjects in many schools of Ethiopia make media the important part in the teaching learning process.

However, teachers' production and utilization of instructional materials in Dera woreda secondary schools seems below the expected level. Therefore, this research intends to investigate the production and utilization of instructional materials by secondary school teachers in Dera Woreda.

1.2. Statement of the problem

According to Croft (2000), a visual presentation of an idea or a concept using pictures, charts and models help the learner to develop mental images of the object that we are talking about.

As an old oriental saying goes, "If I hear, I forget; If I see, I remember; If I do, I understand." If a child could "see" what we are talking about, it helps him understand what we exactly mean in words. Seeing, hearing, touching, smelling and manipulating things in the environment tells the child what the world is like. Materials such as toes, charts, pictures, maps, diagrams are basically materials of sight offer a variety of experiences, which stimulate the senses and promote self-activity in children.

Moreover, the use of instructional materials makes students learn through all their senses. When students see, touch, try and do things, as well as when they hear natural sounds then the visual audio, tactile or other images of these activities or scenes will be created, printed in student's mind (Bestate, 1997).

As opposed to this, teaching by mere telling or single medium or learning by more listening will only give students very high sense for performing, printing and storing the relevant audio and visual images in their mind. Therefore, it is very likely that students forget ideas and concepts quickly and easily. So, instructional media has a great role in making lesson enjoyable, pleasant and permanent (Timothy, 1996:140).

Teaching aids are used in the class for many reasons. For instance, there is a sense that both learning and teaching depend on effective a teacher who has conceptualized the subject matter and produced desired results in the course of his or her duty as a teacher (vchefuna, 2001:13).

In the view of that, the Education and Training Policy of Ethiopia states that due attention is given to the supply, distribution and use of educational materials, educational technology and facilities (TGE, 1994:86). Furthermore, the recently introduced policies emphasize the integration of instructional materials in the schools.

The use of instructional materials provides the teachers with interesting and compelling platforms for conveying information since they motivate learners to learn more. School pedagogical centers have been used as the center of production of instructional materials and innovations (ICDR, 1996). According to the MOE (1997), the main functions of pedagogical centers at all levels where learning takes place include:

1. **Coordination:** one of the important functions of pedagogical center is to work closely and cooperatively with the school community. It must involve and mobilize individuals, groups and institutional leaders to share their knowledge, skills, talents and experiences.
2. **Preparation, utilization and distribution of instructional materials:** The uses of instructional materials provide the teacher with interesting and compelling platforms for conveying information since they motivate learners to learn more. Pedagogical centers provide various teaching materials such as models, pictures, charts and flash card materials.

Nevertheless, the status of school pedagogical centers as well as teachers' participation in the production and utilization of instructional materials in the secondary schools of Dera woreda is not explored. So, much is not known about this important component of the instructional process. This study is, therefore, designed to fill this gap.

Accordingly, the following research questions are formulated to guide the research undertaking:

1. To what extent do teachers participate in the production of instructional materials in the sample schools?
2. How often do teachers utilize instructional materials in the classroom?
3. What factors hinder teachers' production and utilization of instructional materials in the sample schools?

1.3. Objectives of the study

1.3.1. General Objective of the study

The general objective of this study is to investigate the teachers' production and utilization of instructional materials in the secondary schools of Dera woreda, North Shoa zone.

1.3.2. Specific Objectives of the study

The specific objectives of the study are to explore:

- ✓ teachers' participation in the production of instructional materials in the secondary schools,
- ✓ teachers' utilization of instructional materials in the classroom,
- ✓ the major factors that affect the production and utilization of instructional materials by teachers in the secondary schools.

1.4. Significance of the study

This study may provide the following benefits/importance:

- ✓ It may help the teachers as well as school leaders to better understand the importance of instructional materials.
- ✓ It may initiate teachers in improving the teaching learning process.
- ✓ It could help the schools to develop more effective ways of using pedagogical centers.
- ✓ Finally, it could serve as a source of information for future research on the area.

1.5. Delimitation of the study

The scope of this study is geographically delimited to the government secondary schools of DeraWoreda, North Showa Zone, Oromia regional state. In North Showa zone, there are 14 Woredas consisting of 49 secondary schools (9-12). Nevertheless, the study is confined to only Dera woreda which comprises five government secondary schools (Bitotessa-17, Tuti, Salayish, Cheka and Selelkula secondary schools) due to a number of reasons. First, this woreda, as compared to the other woredas, could relatively be a good representative and is helpful to get valuable information for the study. Second, the researcher is well aware of the problems of the schools located in the woreda. Apart from this, the study mainly focuses on the status of teachers' production and utilization of instructional materials in the sample secondary schools.

1.6 Limitation of the Study

The researcher expected the following challenges during conducted this study these are: time and financial resource constraint, lack of documents related to plan, report and training manuals, resources, and shortage of time to make detail investigate on the area of the research. In addition, the respondents may not provide their true opinions during interview and questionnaire. However, the researcher tried to employ self-data administration to resolve time and financial resources constraint.

1.7. Operational definition of key terms

Instructional media: educational inputs that are vital to the teaching of any subject in the school curriculum. They are material which the teacher uses in supplementing his teachings (Adeniyi,2001).

Models: usually imitations, as a replica or a copy of a thing, act or process. Models are a simplified version of a real objects and copies of the real objects (Elwood,2020).

Pedagogical centers: are places that teaching materials are being present (MOE, 1991)

Real objects: are visual aids. They are things themselves; they are reality and not a substitute for reality (Elwood,2020).

Utilization: refers to the usage degree of a given material in the execution of a given task (Uzuegbu, Mbadiwe and Anulobi, 2013).

1.8. Organization of the Study

The study is organized in to five chapters. The first chapter is introduction. It consists of background of the study, statement of the problem, research objectives, significance of the study, delimitations of the study, operational definition, and organization of the study. The second chapter presents review of related literature. Chapter three deals with research design and methodology. The fourth chapter discusses data analysis and interpretation. The fifth chapter focuses on summary, conclusion and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. Introduction

This chapter is highlight on the review of literature that relates to the opportunities on production and utilization of instructional material in terms of related studies which is related to this study.

2.2. The concept of instructional media

Instructional media a real sort of device's physical means to carry instructional contents (knowledge, skills and attitudes) from the teacher or other sources to students. They are like vehicle, carry information, represent various channels of presenting information to the learning, carry and bring facts and concepts, ideas, abilities and values to the students in a variety of forms.

2.3. Selection and Use of Instructional Media

In modern society, there are many things which every competent citizen needs to know: things which he/she cannot experience directly. Some of these" experiences" are too remote, some no longer exist concretely, some are too costly, and some others are questionable value for all the people (Kinder, 1959: 10). The effective communication of these experiences can no longer be considered possible with words alone. The very nature of languages, coupled with the limited experiences of most people, often makes it difficult to convey ideas and information efficiently without resources beyond words (Culkin, 1978:3). It is with instructional media of different capabilities that all the experiences above could be brought to the appropriate learning environment (Kemp, 1968:4).

Instructional media are defined variously, where this paper takes in to consideration only two of them. According to the first definition, instructional media is an aid in the teaching of a topic (Romiszowski, 1977:9). Hence, it covers a part in the instructional process where as the remaining part is covered by the human teacher. In the second case, instructional media are defined as materials or devices which present a body of information and are largely self-supporting rather than supplementary in the teaching learning process (Brown, 1969:592). Hence, the definition is founded on broader perspective to include instructional materials ranging

from those that occupy limited instructional time Up to full coverage of the \whole instructional time.

To the nature of existence, the range of media embraces simple and concrete materials as well as complex and abstract experiences (Haney, 1971: 14). Thus, to systematically arrange and reduce the disarray of media into a manageable size, some classification has been made by different authors (Shores, 1960; Brown, 1983). However, this paper will present the classifications of only those that have direct relevance to the study.

Edgar Dale (1956:42) attempted to classify media on the basis of the degree of experiential concreteness; and hence, through the "Cone of Experience," Dale illustrated graphically the relationship of audio-visual materials as organized proceedings from real and concrete experience at the base to verbal abstract experience at the apex. Thus, from level of doing or experiencing, the pupil passes to the level of observing and listening or reading.

Sam path (1984:26) categorized the eleven different experiences into three, namely direct experience, projected aids, and non-project aids. Direct and purposeful experience provides rich and firsthand experience. Learning is attained through direct and maximum physical involvement of the learner. Accordingly, the respective instructional materials include real objects, projects, excursions, experiments, etc.

On the other hand, are said to be indirect experiences, due to the fact that the learning experiences are comparatively abstract ones. Projected aids include films, overhead projectors, TV, silent and sound motion picture, etc. and non-projected aids include chalkboard, charts, models, etc. In terms of relative effectiveness for instruction, therefore, direct experience is most effective the indirect, and, projected aids are more effective than non-projected aids (Sampath, 1984:26).;

According to Marshal McLuhan, 'The medium is the message," in the sense, all the thinking and pattern of human affairs are caused. Not by the type of content or information conveyed by a medium, but by the medium used to process the information (Culkin 1978:5). In other words, McLuhan has generated much interest in the very basic question, at to the effectiveness of the media themselves ignoring content for the moment (Siegel, 1973:68).

M1cLuhan (1964:23) hence, classifies the media on the basis of level of learner participation. According to Mcluhan, some media demand low level of learner participation, and called them as "hot media". Radio, movie and lecture are typical examples of hot media. And others are attributable to low definition, and labeled as• cool media." The very media are identified as cool by the presentation of meager amount of information and high participation level of the learner. Typical examples of cool media are TV, telephone, cartoon, chart etc.

The media have been referred to being either static or dynamic, i.e., either they can or they cannot depict motion. In other words, given a certain medium (hardware), the form of the message to be transmitted through it could be identified as either mobile or stationary (Green land, 1963:3). Hence, a particular medium could be named as still or dynamic, depending on the motion of the message to be communicated. Graphics print and pictures, for example, are said to be still media, whereas films and film strips are among dynamic media (Kinder, 1959: 156).

On the other hand, sensory channel classification (Romiszowski, 1977:61) presupposes an instructional medium as dominated by either of the sense organs, namely hearing, sight, touch smell, taste and kinesthetic. Although learners receive information via sight, hearing, touch, smell, taste, and kinesthetic, the degree of involvement varies; and hence, in most cases, the required learning experiences were acquired via the senses of sight and hearing (Culkin, 1978:5).

Audio media are known to communicate message via hearing. Although the media under audio vary; include tape recorder, radio and telephone (Kemp, 1974. 14) visual media. On the other hand, are those materials mainly designed to transmit messages" sense of sight Thus, visual media include pictures (drawings, charts projectors) and concrete objects (the real thing, models, mockups) (Green land, 1963:2).

The term audio-visual, on the other hand, depicts those media that possess the quality to involve both senses of sight and hearing (Haney, 1971: 14). Television and video tapes could be cited as typical examples of audio-visual media. However, apart from this, in most cases, it is customary to call any instructional medium as audiovisual media (Cross, 1968). In general, one would require a multi-dimensional classification and even if one could devise such a comprehensive classification, different people would no doubt wish to place particular media in different positions (Romiszowski, 1977:61).

On top of the aforementioned general nature, in practical sense, some media are exposed, for external variables that affect their inherent qualities, namely legibility, clarity, sufficiency; physical conditioned (Goltry, 1958:54). Appropriately designed materials should be simple with all non-essential details eliminated (Brown, 1989:208). In most cases, these qualities were associated with visual media, namely chalkboard, notes, charts, pictures, posters, etc.

Instructional materials are mainly located in resource centers, namely Audiovisual Center (Pedagogical Center) and library (Shores, 1960:34). The Awaji Pedagogical Center (APC) is in charge of facilitating the role of instructional materials in teaching. APCs are centers of innovation ready to assist teachers in their problems to develop new ways and approaches to teaching, to produce models or prototypes that can be used by teachers as a point ·of departure for developing their own teaching aids (MOE, 1982: 19). According to Brown (1985:70), the uses of a wide variety of audio-visual materials enable teachers to provide more effective learning experiences for students. Amare (1995: 165) says.

> *From the point of view of educational communications, it is argued that the different media complement and supplement, resulting in multi-media effect. Be it due to the effect of stimulating different perceptual nerve endings or due to the additional time required, multi-media approaches are found to be more effective in behavior for motioned change of behavior.*

Thus, the method of multi- media or cross-media presentation, i.e., the Utilization of appropriate sequences of interrelated instructional materials, is likely to reinforce or strengthen learning (Kempt, 1968:4; and Wittich, 1973:317). Multi -media, Brown (1969:593) says, is a methodology based on the principle that variety of audio-visual media and experiences correlated with additional instructional materials reinforcing each other.

Environmental set-ups as well as curricular elements were given due consideration in the process of selection. However, these by no means could safe guard instructional effectiveness unless the behavior of the teacher is taken into account (Locatis, 1984:63). In other words, it is appropriate to say that even with the best buildings, well-printed books, high quality of instructional materials and bright students, the standard of education cannot be improved if the teacher is Dot competent and keen to teach (UNESCO, 1980:37). Thus the forthcoming topic will exclusively

deal with the instructional behavior of elementary school teacher, i.e., the educational training as well as instructional performance in relation to selection and use of instructional media.

2.4. Functions of instructional media

2.4.1. General use of instructional media

- ✓ To facilitate communication between the teacher and the students.
- ✓ To create common understanding between the teacher and the students.
- ✓ To promote students learning.

2.4.2. Specific use of instructional media

- ✓ Make learning meaningful.
- ✓ Make learning permanent learning.
- ✓ Raises students' involvement in learning.
- ✓ Bring and add useful varieties to the instructional process.
- ✓ Increases student's interest and motivation in learning.
- ✓ Instructional materials can be used to evaluate students' performance.

2.4.3. Media helps to promote students learning

Instructional environment, stimulus rich instructional environment is a much broader environment that is rich with materials activities, phenomena or events what the students learn in the schools. The provision of many varieties off instructional materials and activities make acquire knowledge, skills and attitudes through the use of all sense organs.

Providing students with stimulus rich environment means nothing but using varieties of instructional materials and activities make acquire knowledge, make the students see, touch, handle, investigate, try, do and discover things for themselves (Thimoty et.al, 1997; 147).

2.4.4. The importance of instructional media for students learning

Instructional media can be anything which helps the teaching-learning process/activity. It obtained from two sources.

1. From technological results (innovations):

   Examples; TV, computers, Radio, tape, cinema, overhead projector and digital visual disks (DVD)

2. Locally available resources:

Examples; plants, rock types, soil types, cultural music instruments, tin, vegetables, and etc.

Instructional media is not the only worth full thing for students but also very useful thing for teachers. It allows a teacher to present a lesson very easily and clearly. The teacher may also present a very difficult point very easily. Similarly, the students can understand the lesson topic very easily. Finally, both the students and teachers can be effective in their activities (USAID, 2003).

2.5. Using Visual aids

Many teachers are afraid to produce visual aids for their lesson. They do not believe that they have the necessary artistic failure and they think that their students will be unimpressed by their efforts. This is rarely true. The students are very impressed by very rudimentary entry efforts. Anyone can produce sketches or figures of sufficient quality with a little practice (ICDR, 2003).

2.5.1. Types of visual aids

Drawings: it can be anything from a single face showing an expression to a complex drawing of a scene or a situation. They can be prepared in advance on a piece of papers or drawn during the lesson on the blackboard.

Photographs: it is extremely useful for a school library or particular department to collect interesting photographs from magazines, newspapers, etc.

Real-life objects: every day object from your home or the school can be used to make an exercise seen more real or to enable the students to visualize something more easily.

2.6. TALULAR and Its Importance

Basically "TALULAR"is not a single word. It is combination of different words. Each of the letter is read as "T = teaching, A = and, L= learning, U= using, L= locally, A= available and R= resources. That means teaching and learning using locally available resources.

Preparing or obtaining the following kinds of instructional materials does not entail much expenditure on the parts of individuals' teacher or school. These are on the part of individuals' teacher or school. These are materials that can be produced or secured from local resources with only some extra effort, some skills and lower cost on the part of teachers, schools and located educational officials like students' text books, real things, events and phenomena, models, chalk board aids, flash card and so on.

"TALULAR" principles are especially used in Nigeria and Malawi widely. Malawi teachers firstly, a dust pre conditions to make teaching aid. That is, they initially prepare out lines which can help them to make teaching aid. Then, they prepare instructional media from locally available resources. (USAID/ IQPEP 2003:2).

2.6.1. Main advantages of "TALULAR"

- It is less expensive than buying readymade instructional materials.
- It is limited and specific resources, instructional purposes and their students' needs and levels.
- It helps teachers redefine their teaching objectives and clarify in their mind what it is (the content) they are trying to communicate.
- Teachers can involve students in planning designing and producing instructional materials.

2.6.2. Availabilities of different instructional materials

Instructional materials include text books, charts and maps, audio visual and electronic instructional material such as radio, tape recorded, television and video tape recorder. other category of materials resources consist of paper supplies and writing materials such as pens, eraser, pencil, ruler, exercise books, Cray on chalk, drawing books, note books, work books and soon (Atkinson, 2000), perceived that the magnitude of instruction are more scientific base; make instruction more powerful; make learning more immediate and finally make access to

education more equal. Adeogun (2001) discovered very strong positive significant relationship between instructional materials and academic performance.

According to Adeogun, schools endowed with more resources performed better than schools that are less endowed. This corroborated the study Babayomi (1999) that private schools performed better than public schools because of the availability and adequacy of instructional materials.

2.7. School pedagogical centers

Most commonly understood as the approach to teaching, pedagogy refers to the theory and practice of learning, and how this process influences, and is influenced by, the social, political and psychological development of learners. Pedagogy, taken as an academic discipline, is the study of how knowledge and skills are imparted in educational context, and it considers the interaction that take place during learning. Both the theory and practice of pedagogy vary greatly, as they reflect different social, political, and cultural contexts.

School pedagogical centers have been operational since 1970s as a means by which teachers, students and schools are mobilized, oriented and convinced about the prevailing educational program so they give the necessary support towards the attainment of the educational goals. According to the guideline prepared by ICDR (1996) the centers have the responsibility of coordinating, conducting research and disseminating results, training and preparation and utilization of instructional materials.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

In this chapter, research approach and design, population and sample, sampling techniques, source of data, data collection instruments and procedures, methods of data analysis and ethical considerations are described.

3.2. Research Approach

The researcher used quantitative and qualitative research approach. The reason for the selection of this approach was to generate results that can be readily generalized to the target population. Since this study attempts to investigate the status of teachers' production and utilization of instructional materials, this approach would be considered as appropriate for the realization of the research objectives.

3.3. Research Design

This research was conducted using descriptive research design. A descriptive research design has a purpose to describe the existing characteristics of a particular individual, situation or groups (Yalew, 2006). Hence, the researcher used this design intentionally because it helps to gather relevant information to the stated problems.

3.4. Target Population and Sample

3.4.1. Target Population and sample frame

According to Kothari, (2004), sample frame is the complete list of elements of the study population from which sample is drawn. The target population of the study covers 357 students, 105teachers, 9 principals and 5 pedagogical centers coordinators.

3.4.2. Sampling Techniques

Both probability and non-probability sampling techniques is used for selecting sample respondents**.** First, the researcher will make sure the availability of teachers, students, principals and SPC coordinators in the work area at the time of data collection by discussing

with the principal of each school. Those who are not willing at the time, the researcher was excluded them from the total population. After doing this, all respondents were grouped in to four strata based on their profile because these groups may not have similar understanding on the issue, i.e. teachers, students, principals and S.P.C. coordinators. Then, from the teachers and students' strata, respondents were selected by using a simple random sampling. Using this technique helps the researcher to give equal chance to the respondents. Finally, principals and S.P.C. coordinators were included in the sample using purposive sampling technique. The following table presents summary of the sampling frame.

Table 3.1 Population, Sample Size and Sampling Techniques of the Study

No	Items	Population	Sample size	Sample size in percent	Sampling techniques
1	Students	3214	357	11.12%	Stratified random sampling
2	Teachers	105	105	100%	Availability
3	Principals	9	9	100%	Purposive
4	S.P.C	5	5	100%	Purposive
	Total	3333	476		

3.5. Source of Data

The researcher used both primary and secondary data sources. These sources help the researcher to obtain relevant data for the study.

3.5.1. Primary Data Source

The primary sources of data include students, teachers, principals and school pedagogy center coordinator.

3.5.2. Secondary Data Source

The secondary source of data were school record documents including reports regarding school pedagogy centers (SPC), books, journals, etc.

3.6. Data Collection Instruments and procedures

In order to attain the purpose of this study, data were collected by using questionnaires, interview and observation as described below.

3.6.1 Questionnaire

Both open ended and close-ended questions were prepared and distributed to the respondents. Open-ended questions help to know respondent's attitude, perception and behaviors and help to the respondents give their response freely according to their own will. On the other hand, close-ended questions help to the research to get the data at short time, and help to obtain set of responses from the respondent. Moreover, using questionnaires is cost effective relatively from other methods and helps the researcher to obtain information from many respondents. The researcher designed the questionnaire in English and then translated it into Amharic language.

3.6.2 Interviews

For the qualitative information the researcher used interview to gain important information from those who have good experience in relation to the specified title. Those respondents were selected purposively because they have important facts which can't gain from other participants and to get more information and to make it clear to the respondents and the researcher used a semi structured interview by doing this the researcher gained additional information that is used for the interpretation.

3.6.3. Observation

Observation is one of the means of data gathering instrument (Merriam, 1998). Observation is also another key data gathering tool that helps the researcher as an eye witness to the situation.

The major points to be observed are:- school facilities and record documents such as pedagogical center in the school, charts, maps, diagrams, graphs and poster, models, real objects, pictures,

instructional media like radio, TV, CD, DVD, etc. Guideline material for school pedagogical center, report for pedagogical activities, annual plan for school pedagogical center, teachers and students participation in production and utilization of teaching materials in the school pedagogical centers and other necessary documents.

3.6.4 Procedure of Data Collection

The researcher went to the sample secondary schools and administered the questionnaire to the selected students and teachers. A letter of introduction was attached to the questionnaire which introduced the researcher, indicate the purpose of the study and give instruction on how to complete the questionnaire with the help of class representative. The questionnaires were collected by the researcher.

3.8. Methods of Data Analysis

Data collection from the questionnaire were edited, coded and entered into computer using SPSS software (statistical package for social science) version 20 and then analyzed using descriptive statistics (percentage and frequency distribution, mean and standard deviation)for each research question. The five point scale of strongly disagree was collapsed into 2-point scale of Agree and disagree, and the responses were changed to scores for further analysis. On the other hand, the data collected through interview was organized in logical manner and categorized in thematic areas in meaningful themes. The researcher triangulated and synthesized the data in order to strengthen the research findings and conclusions.

3.9. Ethical Considerations

Ethical considerations play a role in all research studies and all researchers must be aware of and attend to the ethical considerations related to their studies. Therefore, the student researcher communicated all secondary schools legally and smoothly. The purpose of the study was made clear and understandable for all participants. Any communication with the concerned bodies was accomplished at their voluntarily agreement without harming and threatening the personal and institutional wellbeing. The identity of the respondents was also kept confidential.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Introduction

In this chapter there are different parts like demographic characteristics of respondents which include sex, age, grade, educational level, and work experience of respondents and response and techniques, result and discussion or interpretation of the data based on the data obtained from respondents and different studies.

4.2 Response Rate

For this study a total of 462 questionnaires (for students 357 and teachers105) were distributed. The researcher contacts each respondent and made an explanation about the questionnaire during distribution in order to avoid ambiguity and create clarity. According to this from 462 questioners, 446 (96%) questionnaires have been returned. In addition to this, the researcher also conducted interviews with informants such as school principals (9) and SPC (5) selected purposively.

Table 4.1: Questionnaires distributed and returned

No.	Respondents	Distributed	Returned	%
1	Teachers	105	100	95.2
2	Students	357	346	96.9
Total		462	446	96.5

Source: Field Survey, 2020

From the above Table 4.1 it is understood that almost all of the questionnaires distributed was collected with the response rate of 96.5% because the researcher made first good information with different individuals on the importance of their information in relation to the given questions and on how to fill the questionnaires.

4.3. Background of the Respondents

Table 4.2: Analysis of students' general information

Variables	Characteristics	Frequency	%
Gender	Male	200	57.8
	Female	146	42.2
	Total	346	100
Grade	9^{th}	100	28.9
	10^{th}	92	26.6
	11^{th}	84	24.3
	12^{th}	70	20.2
	Total	346	100

Source: Field Survey, 2020

As indicated in the above table 4.2 the general information of students were 200 (57.8%) of students in Dera Woreda secondary school were male and 146(42.2%) of students are female. This implies that the larger number of students in the respective school were male. There is unmatched of sex. The numbers of students from grade 9-12 were; 100 (28%), 92(26.6), 84 (24.3%) and 70(20.2%) respectively. This indicates that the number of students was decrease from the lower grade (9) to higher grade (12). In general, the characteristics of the respondents has positive implication on the research activity in that it helps the researcher to get the necessary data from different sex and grade level.

Chart 4.1 Students participation in preparing and using instructional media in pedagogical center

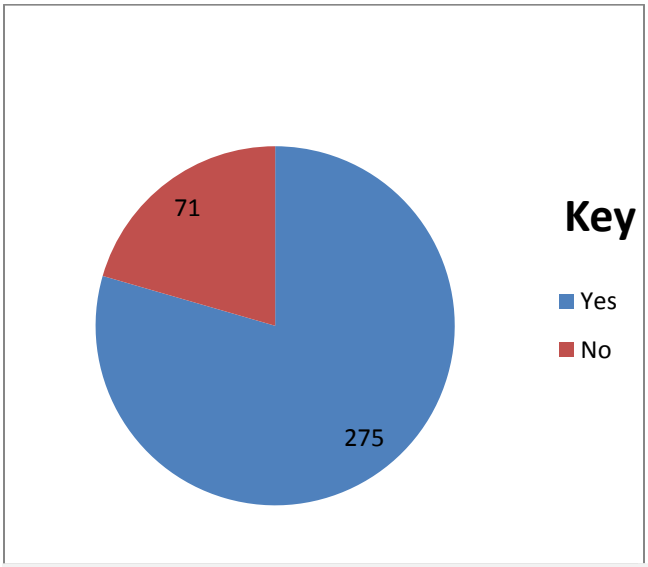


Chart 4.1.1. Prepare and provide teaching aids to your teachers to be used in the learning-teaching process

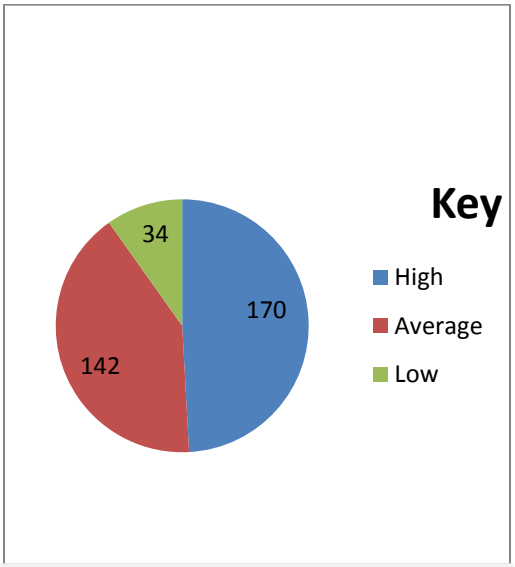


Chart 4.1.2. Level of students' participation in the preparation of teaching aids in the SPC

Source: Field Survey, 2020

Figure 4.1.1 revealed whether or not there is students' interest in preparing and providing instructional materials to be used in the learning teaching process. Accordingly, 275 (79.5%) of the respondents indicated that there is an interest of students in preparing and providing instructional materials to be used in learning teaching process whereas 71(20.5%) of them described that there is no interest of students in preparing and providing instructional materials to be used in learning teaching process. Figure 4.1.2, also revealed the level of students' participation in the preparation of teaching aids in the SPCs. As shown in the figure, 170(49.1%), 142(41.1%), and 34 (9.8%) of the respondents rated high, average and low respectively. This implies that students are interested in actively participating in the preparation of IMs.

In this regard one of supervisors stated that:

"To be honest, in our school, the interest of teachers in preparing and utilizing instructional material was high while the interest of students was less when we compare to the teachers."

Similarly, when I observed Tuti secondary school, even if there is lack of resource, most teachers have an interest to prepare and utilize IMs in pedagogical centers.

Generally, one can understand from the respondents that most teachers have an interest to prepare and utilize the instructional materials in pedagogical center. However, there was financial problem to fulfill the materials used for preparing instructional material.

Figure 4.1 Responses of students on to what extent teachers used IMs

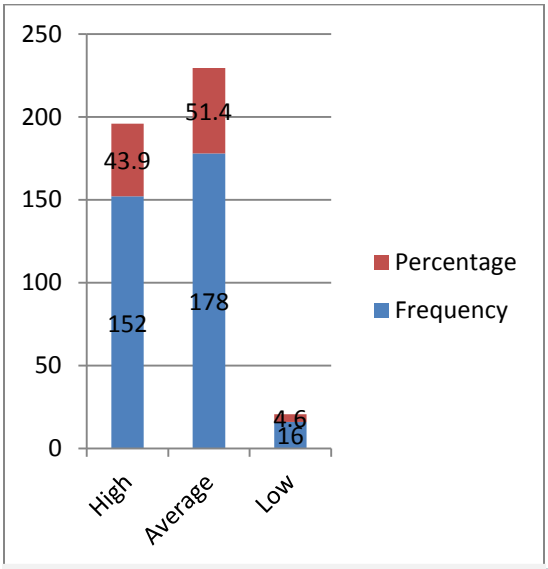


Figure4.1.1. Rate of teachers' effectiveness in using instructional materials in the teaching-learning process

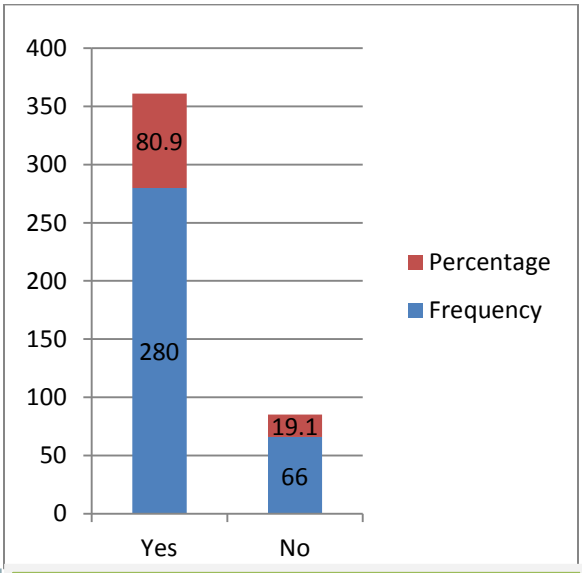


Figure4.1.2. Teachers use instructional materials in the teaching-learning process

Source: Field Survey, 2020

Figure4.1.1 indicate that the rate of teachers' effectiveness in using instructional materials in the teaching-learning process, based on this 178(51.4%) majority of the respondent said average, 152(43.9%) of the respondents said high and 16 (4.6%) of the respondents said low. On the other hand, figure4.1.2 related with whether or not there were teachers who use instructional materials in the teaching-learning process. Accordingly, 280(80.9%) of the respondents said that there are

teachers who use instructional materials in the teaching-learning process whereas 66(19.1%) of them described that teachers did not use instructional materials in the teaching-learning process.

The result indicated in figure 4.1.1 and 4.1.2 were supplemented by results obtained from observation and interviews held with head of school pedagogical center.From the follow up sheet in the school pedagogical centers, the researcher observed that most of the teachers did not use instructional materials frequently. Similarly, the discussion held with head of school pedagogical center showed that teachers did not frequently use instructional materials in class room.All these reslults revealed that the majority of teachers do not use instructional materials in class room as expected of them.

Table 4.3. The role of Instructional materials in the teaching-learning process

No.	Items	Number of respondents	Freq.	%
1.	There will be students' active participation	346	340	98.2
2.	Common understanding of the lesson will be created	346	242	69.9
3.	The teaching learning process will be attractive	346	270	78
4.	The results of students will show improvement	346	190	54.9

Source: Field Survey, 2020

Table 4.3 indicated that most of students340 (98.8%) said there will be students' active participation, 242 (69.9%) reported common understanding on the lesson created with teaching aids, 270(78%) students responded teaching learning process guided by teaching aids was attractive and 190 (54%)respondents said results of students improved due to utilization of IMs.

Similarly, the result of the analysis of interview with principals indicated that the use of instructional media in the classroom has highly significant effect in pupil's learning in the classrooms lessons. They also indicated its importance during the teaching learning process such as making the learning lifelong (understandable).

Therefore,based on the results of teachers and SPC heads responses, observation of SPCs and interview made with head of pedagogical centers at school level,it seems reasonable argue that activities expected from school principals regarding the importance of instructional material in teaching-learning process were sufficiently performed.

Table 4.4.Mean Ratings and Standard Deviation of producing and utilizing IMS towards students

S/N	Item statement	N	Mean	Std. Deviation	Decision
1.	Teachers use teaching aids when they present the lesson in your classroom	346	3.94	1.091	Agree
2.	Teachers encourage students to prepare teaching aids(instructional materials)	346	4.08	.955	Agree
3.	Using teaching aids makes the teaching learning process effective.	346	4.12	.921	Agree
4.	Using teaching aids in various lessons doesn't have any contribution to improve students' learning.	346	1.63	1.078	Disagree
5.	Preparing teaching aids and providing them to your teachers contributes positively to your result.	346	4.13	.936	Agree
	Cluster mean and standard deviation		**3.58**	**0.996**	**Agree**

Source: Field Survey, 2020

Data presented in Table 4.4 showed that the mean ratings of items 1 – 5 are 3.94, 4.08, 4.12, 1.63 and 4.13 respectively with the corresponding standard deviations of 1.091, 0.955, 0.921, 1.078and0.936. The result showed that items 1, 2, 3and 5were rated above the cut-off point of 3.0 and thus accepted while item 4 was rated below and rejected. Moreover, the cluster mean of 3.58 and standard deviation of 0.996 was found to be above the cut-off point of 3.00. This implies that the respondents are affirmative to teachers' perception of the production and utilization of instructional materials in the teaching learning process in Dera woreda secondary schools.

4.4. Analysis of Teachers' respondents

Table 4.5 Demographic data of the respondents (N = 100)

Variables	Freq.	%
Gender:		
Male	72	72
Female	28	28
Age:		
20-30years	37	37
31-40years	42	42
41-50years	21	21
Qualification:		
TTI	-	-
10+3	10	20
First Degree and above	90	90
Teaching Experience:		
0-5years	31	31
6-10years	50	50
11 and above	19	19

Source: Field Survey, 2020

Table 4.5 shows the gender of teachers in the sample that filled the questionnaire. It shows the number of male is quite big compared to that of female teachers. There is a big disparity in gender. The university and college should encourage female students. There were 28 female (28%) teachers and 72 male (72%) teachers in the schools. The table also indicates that 37 (37%) of the respondents were within the age bracket of 20–30 years, 42 (42%) were between31 and 40 years. Others 21 (21%) were between 41 and 50years.The table also reveals that the respondents were no teaching with TTI. Only 10% had a 10+3 while 90% were bachelor's degree and above. Lastly, the table shows that majority of the respondents were teachers of 6-10 years (50), 11and above years (19), and 0-5years (31).

4.5. Production and utilization of Instructional Materials.

Figure 4.2. Responses of teachers on facilities for IMs, presence of guidelines and workshops taken on preparation and utilization of IMs

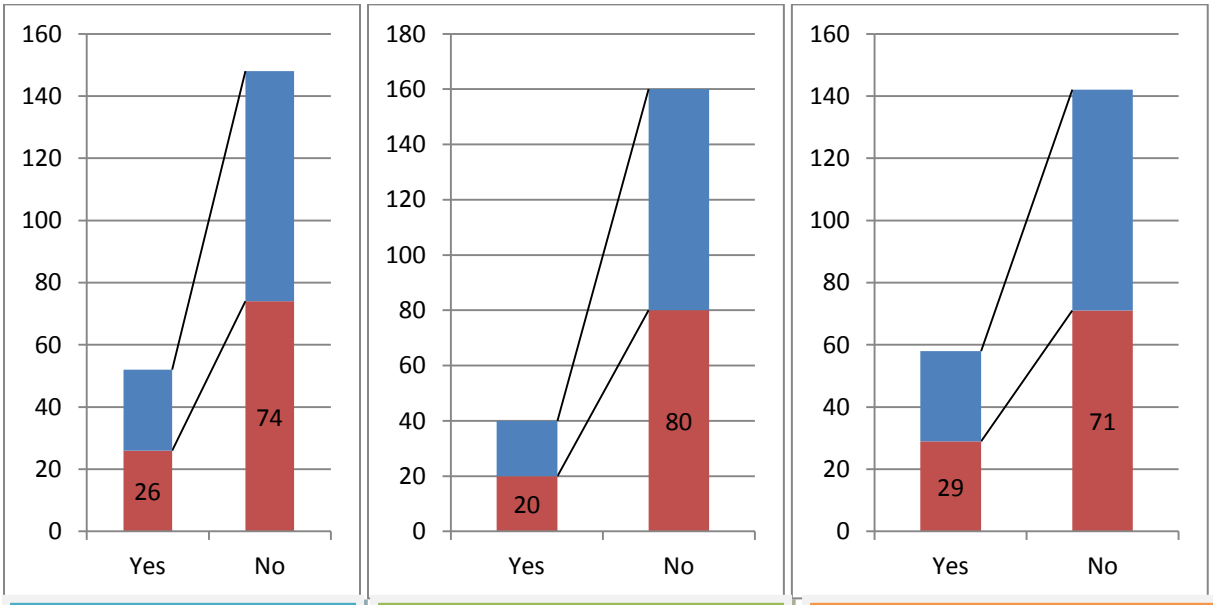


Figure4.2.1. Adequate school pedagogical center facilities for IMs

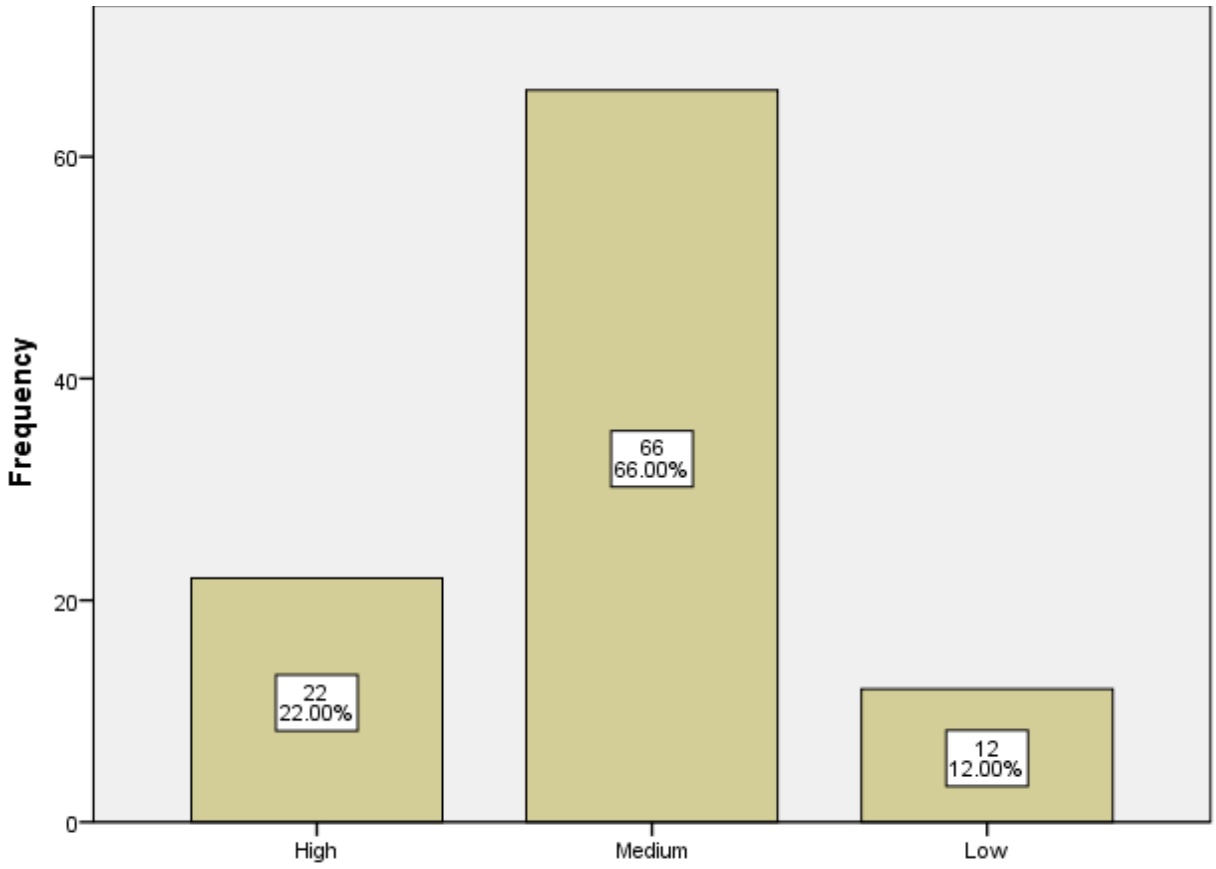
Figure4.2.2 Presence of guideline in school that could help to prepare and utilize the IMs

Figure4.2.3 Seminar or workshop taken on the preparation and utilization of IMs

Source: Field Survey, 2020

Quite obviously, figure 4.2.1. indicates that nothing but the bare facts that the absolute majority or 74% of the teacher respondents reported that there was no adequate school pedagogical center facilities for IMs while an insignificant portion (26%) of them responded there is adequate school pedagogical center facilities for IMs. Consequently, figure 4.2.2. shows that 80% of the respondents responded that there was no presence of guideline and 20% of the respondents responded there was a guideline to prepare and utilise IMS.Lastly, figure 4.2.3. indicated that 71% of the respondents said that there was no seminar or workshop taken on the preparation of IMs and 29% of the respondents reported positively.From this we can conclude that there is no sufficient school pedagogical center facilities, then, there was below an expected presence of guideline in school that could help to prepare and utilize IMs and there was very low amount of seminar or workshop taken on the preparation and utilization ofIMs.

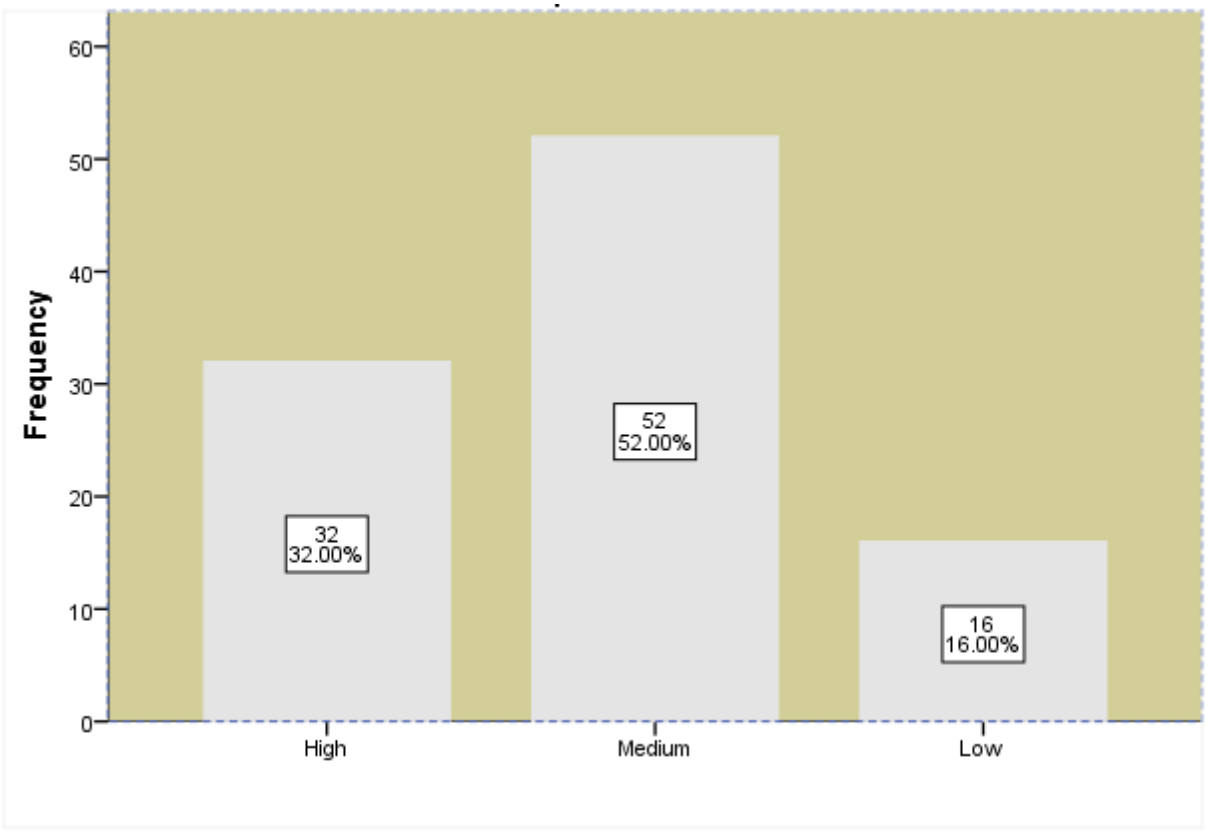
Figure 4.3 participation in production and utilization of teaching aids in SPC



Source: Field Survey, 2020

According to figure 4.3., 22% of the respondents responded that their participation in production and utilization of teaching aids in SPC was high, 66% of the respondents said that their participation in production and utilization of teaching aids in SPC was medium, while 12% of the respondents said that their participation in production and utilization of teaching aids in SPC was low. Generally, the data in this figure indicate that teachers' participation on production and utilization of teaching aids in SPC was moderate

Figure 4.4 Evaluating the contribution of SPC in facilitating teaching learning process

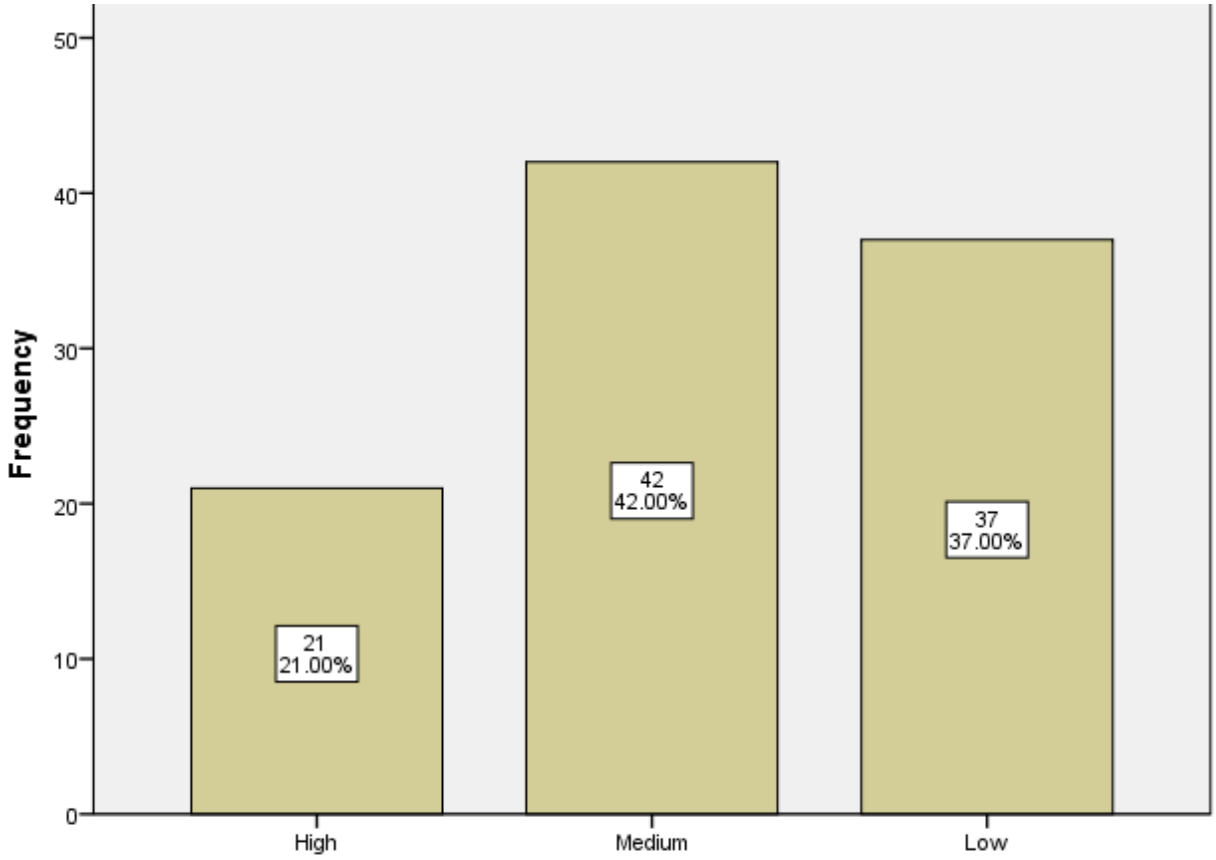


Source: Field Survey, 2020

As shown in figure 4.4., 32% of the respondents responded that evaluating the contribution of SPC in facilitating teaching learning process was high, 52% of the respondents said that evaluating the contribution of SPC in facilitating teaching learning process was medium, while 16% of the respondents said that evaluating the contribution of SPC in facilitating teaching learning process was low. From this we understand that teacher' evaluation on the contribution of SPC in facilitating teaching learning process was medium.

However, the researcher observed that all the selected schools have their own pedagogical centers but their appropriateness was poorly organized and the availability of the IMs and other raw materials was medium. The SPC coordinators have their own activities which were preparing annual plan, budgeting, programming, arranging and organizing, preparing new materials, repairing, facilitating and reporting.

Figure 4.5. collaboration between teachers' and SPC corrdinators



Source: Field Survey, 2020

As shown in figure 4.4., 21% of the respondents responded that the collaboration between teachers and SPC coordinators was high, 42% of the respondents said that the collaboration between teachers and SPC coordinators was medium, while 37% of the respondents said that the collaboration between teachers and SPC coordinators was low. From this we understand that the collaboration between teachers and SPC coordinators was medium.

Table 4.6 Rating the function of school pedagogical center (N=100)

No.	Items	Scale					
		Always		Sometimes		Never	
		Freq.	%	Freq.	%	Freq.	%
1.	Encouraging teachers to prepare and utilize instructional materials	42	42	52	52	6	6
2.	Encouraging students to prepare instructional materials	31	31	45	45	24	24
3.	Providing the necessary instructional materials for teachers	32	32	42	42	26	26
4.	Organizing training workshops/seminars for skill development	16	16	31	31	53	53

Source: Field Survey, 2020

Table 4.6 No.1.showed that 42% always, 52% sometimes and 6% never encourage teachers to prepare and utilize instructional materials, No. 2 indicated that 31% always, 45% sometimes and 24% never encourage students to prepare instructional materials, No 3: 32% always, 42% sometimes and 26% never provide the necessary instructional materials for teachers and No 4 showed 16% always, 31% sometimes and 53% never organize training workshops/seminars for skill development. The data in the above table indicate that from question 1-3 SPCs encourage teachers /students to prepare instructional materials and provide the necessary IMs for teachers sometimes. And they never organize training workshop/seminar for skill development.

Table 4.7. Hindering factors for the production and utilization of instructional materials in the schools

No.	Items	Number of respondents	Freq.	%
A.	Shortage of raw materials	100	89	89
B.	Absence of sufficient budget	100	60	60
C.	Double classes (work overload)	100	91	91
D.	Low encouragement from concerned bodies	100	56	56
E.	Lack of interest/motivation from teachers	100	70	70
F.	Lack of skill in the preparation of instructional materials	100	92	92
G.	Absence of pedagogical center	100	43	43

The data in table 4.7. show that the hindering factors for production and utilization of instructional materials in schools were shortage of raw materials 89%, absence of sufficient budget 60%, double clsses (work overload) 91%, low encouragement from the concerned bodies 56%, lack of interest/motivation from teachers 70%, lack of skill in the preparation of IMs 92% and absence of pedagogical center. Therefore, we can conclude that the most hindering factor was lack of skill in the preparation of instructional materials that is 92%.

Response from the interview with one of the supervisors indicated that: *in the schools there was no deep knowledge on production an utilization of IMs , the problem of awareness on how to produce and utilize and problem of implementation of educational material policy (using materials without guide line.)*

Another supervisor alsi reported that*: in the school there was no enough human resource (lab technitian,librarian ,etc),lack of budget and lack of educational material such as computer , text book and plasma.*

In general, the responses gathered from interviewees indicate that : there was no laboratory in the school,there was no enough human resource,improper use of IMs, lack of awareness on utilization of IMs, lack of budget and problem of timely distribution of budget,problem of managing and controlling IMs and stake holders doesn't work together in school.

Table 4.8.Sample list of instructional materials available in the school pedagogical center

No	Instructional materials	Unit	Quantity
		In No.	
1	Graphics/charts		35
2	Maps		64
3	Diagrams		26
4	Poster		16
5	Models	"	18
6	Real objects	"	12
7	Pictures	"	15
8	Radio	"	6
9	TV		3
10	DVD		3
11	CD		15
12	Others		6

The whole arrangement of the above instructional materials in the SPC was fair and more or less they have a guide materials for SPC.The strong side of the SPC of schools were having annual plan, sufficient budget and presence of weekly report for teachers' utilization of the pedagogical center.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1. Summary of the study

This section deals with summary of the study on production and utilization of instructional materials by teachers' in DeraWoreda secondary school. The objective of this research was to investigate the status of teachers' production and utilization of IMs in DeraWoreda secondary school.

Accordingly, the study is attempted to answer the following basic research questions to meet this objectives.

- To what extent do teachers participate in the production of IMs in the sample schools?
- How often do teachers utilize instructional materials in class room?
- What factors hinder teachers' production and utilization of instructional materials in the sample schools?

This study employed descriptive survey research method. From this school 476 participants took part in the study based on availability sampling techniques. In the process, data were collected from teachers and students by questionnaire. Interview and observation were held with school principal and school pedagogical center facilitators.

After the quantitative data was collected, tabulated and analyzed through descriptive statistics. The data obtained from participants through open and closed ended questions were also analyzed qualitatively in narrative and descriptive form. Hence, based on the data analyzed and interpretation made the following findings were reached.

- The response of the students on the teaching-learning process was most effective, effective and less effective.
- The response of teacher on participation in production and utilization of teaching aids in SPC was high, medium and low.

- The major stumbling blocks to the function of the pedagogical center in the schools are: lack of trained man power to run pedagogical center, lack of coordination between teachers and SPCs facilitators, lack of knowledge and skills how to use PCs. And lack of clear direction from the top to bottom.

- There was no provision of PCs guideline, ground rules in the SPCs in the absence of guideline it is difficult to organize and utilize PCs in meaningful way. In addition, lack of PCs guideline makes the process of implementation not uniform in the school under study.

The follow up system made to fill gap of the school and necessary technical support given to the pedagogical center from top to down is very low. Moreover, there is no timely and change oriented support for teachers and SPCs facilitators from school administration and town educational experts.

5.2 Conclusion

Based on the major findings of the study the following conclusions were made. School pedagogical centers (SPCs) are more or less functional. There are a number of factors that hindered the function of school pedagogical centers. These includes lack of trained man power to run pedagogical center, lack of know-how and skill of teachers on how to produce instructional materials and use of pedagogical centers, lack coordinated work among educational administrators at different levels teachers and pedagogical centers facilitators, shortage of budget of the centers inadequate rooms for the centers, absence of SPC guideline, poor administrative support, and less commitment of principals.

When teaching aids used and pedagogical center activities were practical, there will be easy, quick, clear, correct and common understanding. Accordingly, teachers are mainly expected to achieve teaching-learning process by including teaching aid in their lesson theoretically not practically. However, teachers did not do this. This is mainly because all members of school were not sure of direct effect of pedagogical center. As a result of this, students have no clear idea about pedagogical center utilization in general and instructional media in particular and so that weak involvement in making and putting it functionally. Besides students' academic performance (result) was not improved at the expected level.

5.3 Recommendations

In order to improve teachers use off instructional media in the respective school the following points are important:

- Education offices at different levels assign trained person to coordinate and run the SPCs.
- All concerned schools should capacitate students and teachers interest to use instructional media in the class room setting.
- Training should be given for teachers on preparation and class room use of instructional media. It should be on how to select instructional materials, prepare variety of instructional materials, how and when to use instructional material and how to conduct action research on production and utilization of instructional materials.

- Stakeholders should include the issue of PCs in their plan and discuss with teachers for a specified use of instructional.
- Strengthening coordination among principals at different level of facilitators.
- The school should provide appropriate finance and material for pedagogical center.
- Teachers should use instructional media very effectively in the class room setting.
- Principals should give priority to strength and habit using instructional media on the teaching-learning process.
- Cluster supervisors and principals should arrange training for teachers based on the importance of using and preparing teaching aid to the achievements of educational goals.

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Appendix I

Addis Ababa University

College of education and behavioral studies

Department of educational planning and management (EdPM)

Questionnaire to be filled by students

Dear students:

This questionnaire is developed to get valuable information on the status of teachers' production and utilization of Instructional Materials (IMs) in the secondary schools of Dera woreda. The information you provide is very useful for the success of the research. Therefore, the researcher kindly requests you to provide truthful and relevant information about the production and utilization of IMs in your school.

Thank you for your cooperation!

NB: No need of writing your name

Instruction: Put a tick mark in the appropriate box for the following questions.

Part-I: - General Information

1. Sex a) male ☐ b) female ☐
2. Grade level a) 9 ☐ b) 10 ☐ c) 11 ☐ d)12 ☐
3. School name_____

Part- II: - Questions on the production and utilization of Instructional Materials

1. Do you prepare and provide teaching aids to your teachers to be used in the learning-teaching process?

   A. Yes ☐ B. No ☐

2. If 'Yes' to the above question, your participation in the preparation of teaching materials in the school pedagogical centers is:

A. High ☐ B. Average ☐ C. Low ☐

3. Do most of your teachers use instructional materials in the teaching-learning process? ☐ A. yes ☐ B. No

4. How do you rate your teachers' effectiveness in using instructional materials in the teaching-learning process?

   A) High ☐ B) Average ☐ C) Low ☐

5. What will happen if teachers effectively utilize instructional materials in the teaching-learning process? **(More than one answer is possible)**

   A. There will be students' active participation ☐

   B. Common understanding of the lesson will be created ☐

   C. The teaching learning process will be attractive ☐

   D. The results of students will show improvement ☐

Part- III. Put a tick mark in the appropriate box for the following questions in the table. Keys: SA= Strongly Agree, A= Agree, UD=Undecided, D=Disagree, SD=Strongly Disagree

No	Items	Responses				
		SA	A	UD	D	SD
6	Your teachers use teaching aids when they present the lesson in your classroom					
7	Your teachers encourage students to prepare teaching aids(instructional materials)					
8	Using teaching aids makes the teaching learning process effective.					
9	Using teaching aids in various lessons doesn't have any contribution to improve students' learning.					
10	Preparing teaching aids and providing them to your teachers contributes positively to your result.					

Appendix II

Addis Ababa University

College of education and behavioral studies

Questionnaire to be filled by teachers

Dear Teacher,

This questionnaire is prepared to collect information on the status of teachers' participation in the production and utilization of Instructional Materials (IMS) in secondary schools of Dera woreda. The information you provide is very useful for the success of the research. You are, therefore, kindly requested to provide truthful and relevant response to each of the questions contained in the questionnaire.

Thank you for your cooperation!

N.B. 1. No need of writing your name

Part 1: General information

Instruction: Answer the following questions by putting a tick mark (√) in the appropriate box.

1. Sex: A. Male ☐ B. Female ☐
2. Age: A. 20-30 ☐ B. 31-40 ☐ C. 41-50 ☐
3. Academic qualification: A. TTI ☐ B. 10+3 ☐ C. First Degree & above ☐
4. Service year: A. 0-5 years ☐ B. 6-10 years ☐ C. 11& above ☐
5. School name_____

Part II: Questions on the production and utilization of Instructional Materials

1. Have you taken any course/ seminar or workshop on the preparation and/or utilization of instructional materials (IMs)?
   A. Yes ☐ B. No ☐
2. Is there a guideline in your school that could help you to prepare and utilize the IMs? A. yes ☐ B. No ☐
3. Does your school pedagogical center have adequate facilities and IMs?
   A. Yes ☐ B. No ☐

4. How often do you visit your school pedagogical center?
   A. Always ☐ B. Sometimes ☐ c. Never ☐
   A. Your participation in production and utilization of teaching materials in the school pedagogical centers is: A. High ☐ medium ☐ C. Low ☐
5. How do you evaluate the support you get from the school pedagogical center (SPC) for the utilization of instructional materials (IMs)?
   A. Adequate ☐ B. medium ☐ C. Inadequate ☐
6. How do you evaluate the contribution of your school pedagogical center in facilitating the teaching learning process?
   A. High ☐ B. medium ☐ C. Low ☐
7. How do you evaluate the collaboration between teachers and coordinator of the school pedagogical center? A. High ☐ B. medium ☐ C. Low ☐
8. Please rate the function of your school pedagogical center using the following scale:3 = Always, 2= Sometimes, 1 Never

No	Items	3	2	1
A	Encouraging teachers to prepare and utilize instructional materials			
B	Encouraging students to prepare instructional materials			
C	Providing the necessary instructional materials for teachers			
D	Organizing training workshops/seminars for skill development			

9. What are the hindering factors for the production and utilization of instructional materials in your school? (You can give more than one answer)
   A. Shortage of raw materials ☐
   B. Absence of sufficient budget ☐
   C. Double classes (work overload) ☐
   D. Low encouragement from concerned bodies ☐
   E. Lack of interest/motivation from teachers ☐
   F. Lack of skill in the preparation of instructional materials ☐
   G. Absence of pedagogical center ☐

Appendix III

Addis Ababa University

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Interviews guide for school principals and SPC Coordinators

School name_____ Woreda_____ zone_____

Date_____ Academic year_____

1. How do you see the importance of instructional materials/teaching aids to the teaching learning process?
2. Is there a pedagogical center in your school and what are its major functions?
3. Are there adequate facilities and resources for your school pedagogical center?
4. Are there enough instructional materials in the school pedagogical center?
5. Is there a guideline in the school that could help you to organize and manage the pedagogical center?
6. How often do teachers in your school use instructional materials/teaching aids in the classroom?
7. How do you evaluate the participation of teachers in the preparation of instructional materials in the center?
8. How do you evaluate teachers' utilization of instructional materials in the classroom?
9. What are the hindering factors for the production and utilization of instructional materials in your school?

Appendix IV

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Observation checklist for school pedagogical centers (SPCs)

Name of school_____ Woreda _____ zone_____

1. Is there pedagogical center in the school?

   A. Yes ☐ B. No ☐

2. Appropriateness of the school pedagogical center

   A. Well organized ☐

   B. Poorly organized ☐

   C. Any other ☐

3. Availability of instructional materials and other raw materials in the pedagogical center?

   A. Adequate ☐ B. Medium ☐ C. Inadequate ☐

4. Activities accomplished through coordination by the pedagogical centers

   _____

   _____

5. Sample list of instructional materials available in the school pedagogical center.

No	Instructional materials	Unit In No.	Quantity	Remark
1	Graphics/charts			
2	Maps			
3	Diagrams			
4	Poster			
5	Models	"		
6	Real objects	"		
7	Pictures	"		
8	Radio	"		
9	TV			
10	DVD			
11	CD			
12	Others			

6. Arrangement of instructional materials in the SPC.
   A. Very good ☐ B. good ☐ C. Fair ☐ D. poor ☐
7. Are there guide materials for school pedagogical center? _____
8. Is there annual plan for school pedagogical center? _____
9. How sufficient is the budget allocated to run the work of the pedagogical center? _____
10. Presence of a weekly report for teachers' utilization of the pedagogical center? _____