



ADDIS ABABA UNIVERSITY

COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES

DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

**MANAGEMENT AND UTILIZATION OF EDUCATIONAL MATERIAL
RESOURCES IN SECONDARY SCHOOLS OF DERA WOREDA
OROMIA REGIONAL STATE**

BY

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JUN, 2024

ADDIS ABABA, ETHIOPIA

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BY
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A Thesis submitted to the Department of Educational Planning & Management, in
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DECLARATION

I hereby declare that the thesis entitled 'Management and Utilization of Educational Material Resources in Secondary Schools of DeraWoredaOromia Regional State' is my own work. Furthermore, this study contains neither material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

TEMESGEN BANE

CERTIFICATION

This is to certify that Temesgen Banehas carried out his research work 'Management and Utilization of Educational Material Resources in Secondary Schools of DeraWoredaOromia Regional State' for the partial fulfilment of Master of Arts in educational planning andManagementat Addis Ababa University, School of Graduate Studies. This work is original and it is suitable for submission of Masters of Arts in educational planning andManagement.

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Advisor

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ABBREVIATIONS AND ACRONYMS

AAU: Addis Ababa University

CRC: Cluster Resource Center

EDPM: Educational Planning and Management

EM: Educational Material

ESDP: Education Sector Development Program Educational Material

FDRE: Federal Democratic Republic of Ethiopia

MIS: Management Information System

MM: Material Management

MOE: Ministry of Education

MOFED: Ministry of Finance and Economic Development

NTI: National Teacher's Institute

PTA: Parent Teacher Association

PTSA: Parent Teacher Student Association

TVET: Technical and Vocational Education and Training

UNESCO: United Nations Educational, Scientific and Cultural Organization

WEO: Woreda Education Office

Abstract

The study was directed towards assessing how educational materials resources are managed and utilized in Secondary Schools of DeraWoreda, Oromia Regional State. Descriptive research design was employed. Data were collected using sample of all 25 department head teachers, all 21 administrative and support staffs, two WEO heads, and two CRC supervisors; total of 50 respondents. Respondents were selected by availability sampling technique. A questionnaire, interview and observation were used as tools for data collection. Data gathered through questionnaire were quantitatively analyzed using percentage and mean value whereas the data gathered through interview; open ended questions and observation were qualitatively analyzed. The result indicates that planning, purchasing, allocation and distribution, maintenance, storage, utilization and inventory controls have a significant effect on material resource utilization in Secondary Schools of DeraWoreda Oromia Regional State. The findings indicated that major challenges in the implementation of the management and utilization of educational material resources in secondary schools were: poor maintenance activities, inadequate storage, poor participating involving stakeholders, lack of awareness creation and training about material management functions, and lack of continuous supervision and controlling system. The disposal of obsolete material was found to be insignificant, which has an invisible effect on material resource utilization. The conclusion drawn is that the management of educational material resources in secondary schools under consideration was less than expected. To improve the management and utilization of educational materials: school managements should work closely with the school community and stakeholders. It is also vital to capacitate stakeholders through training and accessible guidelines.

CHAPTER ONE

1. INTRODUCTION

This chapter is concerned with the introductory part of the study. It includes; Back Ground of the study, statement of the problem, objectives of the study, significance of the study, delimitation of the study, definition of key terms and the organization of the study.

1.1 Back ground of the study

Material resources management and utilization in relation to education may be defined as that aspect of managerial functions concerned with planning, purchasing, allocation, distribution, and controlling the proper use as well as maintenance of educational materials and facilities in order to realize the objectives of the education system (Mbamba, 2002). While we were having a general focus on the term management; it is a problem solving process involving effectively achieving organizational objectives through the efficient use of scarce resources in changing environment Chandan (1987). According to Adeyemi and Adu (2010), it is widely accepted that education is one of the leading instruments for promoting economic development as it encompasses some processes individuals go through to help them develop and utilize their potentials. Chapman and Arnold (2004) described that material resource management is a task of keeping balance. This means it is a coordinating function which is responsible for planning, purchasing, receiving, maintenance, storing, inventory control for checking the flow of materials, and unused materials disposal.

Further, Okeke (2007) points out that, through education, individuals acquire knowledge, skills and attitude that are necessary for effective living. The realization of educational quality and access to education is determined by the availability of material resources in the educational organizations. Educational Materials could be understood to be any materials, which are used as input or resources that can facilitate the overall teaching and learning process in schools. UNESCO (1994) also affirmed that material resource management in schools is a specific activity of school administration to achieve positive end results. In other words, facilities which might have suffered neglect as a result of carelessness, ignorance, lack of commitment and lack of resources for management of the preschool teachers would be pruned to damage.

In general, material resource management is common to all types of organization. It is basic because no organization can operate or survive without it. Thus, success or failure of any organization depends on the material resource management and utilization. That means managing material resource has a direct relationship with the success of the organization. At school level, material management involves handling of the movement of materials manually or mechanically at a time with the school. Material handling in schools also includes the storage, control, and protection of materials such as chairs, windows, text books, and library for the purpose of the teaching and learning process.

According to Usman (2007) educational resources are central to the educational activities because they play a crucial role in the achievement of educational goals and objectives since they activate teachers' work and facilitate learning on the part of the student. Hallack (1990) emphasized that the availability of relevant educational resources contribute to academic achievement and that unattractive school buildings, crowded classrooms, unavailability of playing grounds and surroundings that have no conducive and attractive environment can contribute to poor academic achievement. Many countries of our world establish a system for the management and utilization of educational materials because of the role of education in their development.

Inadequate instructional resources, facilities, and a lack of text books and reference materials are some of the main causes of education's poor performance. Therefore; it seems that one of the prime factors that affect the achievement of educational objectives is the scarcity of educational materials in the required quality, quantity, and underutilization of the existing ones. Shortage of educational materials and lack of clear school level policy and direction are the major educational problems in Ethiopia.

The main components for raising the caliber of education are thought to be educational materials. The provision, dissemination, and use of educational materials, educational technology, and educational facilities should receive proper consideration in order to advance the quality, relevance, and expansion of education.

According to the complaints heard from school community and the observation of the researcher, the management and utilization of material resource in secondary schools of DeraWoreda, Oromia Regional State need improvement. This encourages the researcher to focus

on this topic and to conduct a research on the issue, and to bring improvement on management and utilization of material resource.

1.2 Statement of the Problem

The education system of Ethiopia (1994) indicated that to promote the quality relevance and expansion of education, due attention was given to supply, distribution and utilization of educational materials, technology and facilities. The utilization of the resources demands careful planning, supervision, coordination and control. The major problem of confronting the school administrator is how to utilize the available limited funds, man power, equipment, buildings, and materials for effective impacts on the students' learning.

MoE (1994) indicate that to promote the quality relevance and expansion of education, due attention will be given to supply, distribution and utilization of educational materials, technology and facilities. Material resources must be put in place and into consideration for the objectives of the school system to be accomplished. According to Durbin (1989), resources are the only means through which organizational activities, production, service and satisfactory ends are attainable. For the achievement of organizational objectives, resources play the crucial roles. Due to this fact, the emphasis on educational resources management and utilization in the educational institution is unquestionable. In support of the above idea, Chapman and Arnold (2004) indicated that material resources management is a task of keeping balance. This means it is a coordinating function which is responsible for planning, purchasing, receiving, storing, inventory control for checking the flow of materials, and unused materials disposal. The Ethiopian Council of Ministers Regulation no.50/1999 states that Educational Materials to mean "text books, visual aids, charts, maps, science and vocational instruments, children's toys, different forms and other materials applicable in education sphere." So Educational Materials could be understood that to be any materials, which are used as input or resources that can facilitate the overall teaching and learning process in schools. To achieve the objectives of education, the school principals must bring all their abilities, physical, mental and emotional to the job. They need to be well equipped with the necessary skills and knowledge to managing well the educational materials. Effective management involves ensuring efficiency and effectiveness in the use of the available materials together with the ability to combat any constraints. They also need to adopt modern methods of facilities management where continuous technological changes are observed in all aspects. But,

as clearly indicated in ESDP program action plan, many principals and offices do not yet have the required capacity to exercise their responsibilities effectively. Moreover, the quality and access to education is mainly determined by the availability of material resources in the sector.

As pointed out in Hallack (1990) when setting up a map of priorities for investment in education and training, policy makers must, at the same time, take in to consideration the need for increasing efficiency in the use of resources. The attainment of educational objectives through teaching-learning process is more dependent upon how educational institutions are capable of managing and utilizing their material resources efficiently and effectively. Educational materials are scarce and costly resources, the knowledge of how these resources are properly managed and utilized in the educational system is very important. Quality, relevance and access to education can be attained if educational materials are properly managed and utilize in an educational institution. Gopalakrishinan (1998) pointed out that the materials resources management function include the materials planning, purchasing, receiving, storing, inventory control, unused materials disposal.

In addition, Worku (2007) emphasizes that the success of the teaching-learning process is practically dependent up on how schools are capable of managing and utilizing their resources. That is effective and efficient management of school material resources may lead to success whereas improper and poor handling of material resources is liable to lead to failure. Educational institutions with improper and poor handling of material resources tend to be less successful. The poor management of material resources and lack of clear school level policy of material resources management and direction are the major educational problems in Ethiopia. However, according to Amare(1999), proper utilization of existing educational materials are the major factors effects on the expansion of education, lack of proper planning, storing and controlling the educational materials are the most serious problems identified in our education system.

Now a day's educational material resources are considered to be major instruments for raising quality of education. They are typical means for promoting modernization and extension of educational systems (UNESCO, 1984:9). The improvements in all aspects of education, however, necessitate incurring a considerable amount of financial resources, which is a great challenge for developing countries. Allocating large amount of budget and the availability of resources by the government alone do not guarantee effectiveness. Hence, exhaustive utilization

of the material resource is essential. For the better utilization of educational materials, stakeholders should have necessary knowledge what resources are required and how these resources are managed. However, from the researcher practical experience, personal observations of DeraWoreda Secondary schools in the Development Team Training Program and complaints heard from school community, there are cases in which some educational materials have been wrongly utilized. In such a situation, it would be logical to expect some gaps in the management and utilization of educational materials. For instance, broken chairs at the back of classrooms, dusty libraries, poor management, low student achievement, low community participation, shortage of teachers to manage and use the educational resources, poor maintenance culture of educational materials resources, limited capacity of school leaders and the like besides the various challenges that were raised by school principals to manage the educational materials.

All these experiences encourage the researcher to focus on this topic. Expensive teaching materials like Plasma TV and computers have been stored at improper situation without paying any attention. From six secondary schools of DeraWoreda three of them have no plasma, but three of them have plasma: Salayishhas 14 plasmas, Cheka Genet has 12 plasmas and Bitotessa 17 has 21plasmas. Generally there are 47 Plasma in those three secondary schools, but all of them are dysfunctional. Also computers are not properly used. Students' text books are stored in some schools and there is a shortage in other schools. There is improper use of laboratory, library, chairs, tables, buildings and others. Material resource management in secondary schools faced several challenges. Even though improper utilization and management of educational materials is a serious issue that incurs additional cost to the government gets little attention by the stakeholders.

Due to the above problems, it is difficult to say that the stated strategies and objectives of the education and training policy has fully implemented without the educational material is properly managed and utilized.

This research is different from the above study that focuses on the educational material management and utilization in DeraWoreda secondary school.

Therefore, as opposed to others, the present study is different from the above mentioned researchers: (a) It is concerned with material management functions (such as, planning, purchasing distribution, controlling), challenges faced for effective management and utilization of educational material management, and implementation of policies and guidelines. (b) All stakeholders couldn't participate equally in order the practice educational material management.

In contrast to the previous studies which were more care about resource management, but this study was attempt to fill gaps by focused on the school material resources management and utilization together. The study therefore will contribute its part to fill in such knowledge gaps on the issue under investigation. It is also believed that the research will serve to governmental and non- governmental organizations to conduct further study in the area. Thus, the following basic research questions will be the main focus of the study;

Basic Research Questions

1. How are Educational Material Resources managed and utilized to achieve educational objectives in secondary schools of Dera Woreda Oromia Regional state?
2. What main roles do stakeholders play in the management and utilization process of educational materials?
3. What are the major problems related to educational material resources management and utilization in secondary schools of Dera Woreda?

1.3. Objectives of the study

The general objective of this study was to assess the management and utilization of educational material resources in secondary school of Dera Woreda Oromia Regional state.

The specific objectives of the study were:

1. To determine how are Educational Material Resources managed and utilized to achieve educational objectives in secondary schools of Dera Woreda Oromia Regional state.
2. To assess what role do stakeholders play in the utilizations and management of educational materials.
3. To explore the major problems related to educational material resources management and utilization in secondary schools.

4. To identify the possible solution/recommendation that alleviates problems of management and utilization of material resource in secondary schools.

1.4 Significance of the study.

Educational materials were critical in puts in achieving educational objectives. For secondary school to achieve its objectives there should be proper management and utilization of its educational inputs including educational materials were indispensable in any educational institution.

Therefore, Woreda education offices more or less allocate budget per year to alleviate the shortage of educational materials. On the other hand, it looks like there was dissatisfaction of staffs on the availability and supply of educational materials in secondary school. This circumstance entails that either there is something wrong somewhere in needs assessments, materials planning, or on the proper utilization of the existing educational materials which negatively affect the attainment of the secondary schools goals. For this reason, the current study is believed to have the following significance:

1. It may initiate other researchers to deal more about the existing problems in depth.
2. It provides awareness on managerial activities, roles of principals and how do students and teachers utilize the available material resources like text books, laboratories and libraries to influence students' performance.
3. It helps to identify the major problems in management and utilization of material resources for secondary schools and other organizations.
4. The study will create an awareness of the existing problems in management and utilization of material resource.
5. It may provide possible solution to minimize the existing problems of material resource management and utilization.

1.5 Delimitations of the Study

The problems of material resources management and utilizations are not only in secondary schools of DeraWoredaOromia regional state, it also affects primary and secondary schools of the whole country. DeraWoreda is found in North Shoa Zone Oromia regional state, which contains 85 primary schools (1-8) and six secondary schools (9-12). However, because of

financial problems and lack of time due to work overload, it is delimited to study material resources management and utilization in secondary schools of Dera Woreda Oromia regional state.

Moreover, as mentioned earlier, this study focuses on identifying how educational materials resources are managed and utilized, role of stakeholders and problems related to educational material resources management and utilization in secondary schools of Dera Woreda Oromia regional state.

1.6. Limitation of the Study

The following were some of the major problems that the researcher wants to mention as limitation to the study. First, the researcher faced lack of adequate literature. Second, lack of adequate financial support affected the coverage of the study as well. Third, unwillingness of the respondents to fill the questionnaire and returning it on time was observed. Finally, WEO heads and school supervisors were also busy to participate in the interview. In spite of these problems, the study was completed successfully.

1.7 Operational Definition of Key Terms

The researcher tries to define the following terms according to the context utilized.

Educational materials: are all materials used as inputs/resources, in the school that -are directly or indirectly used to facilitate the overall teaching-learning process.

Maintenance: is the function which has as objective to ensure the fullest availability of production equipment, utilities and related facilities at optional cost and under satisfactory conditions of quality, safety and protection of the environment. Maintenance can also be defined as those activities required keeping a facility in as built condition, so that it continues to have its original productive capacity.

Inventory control: the school administration function of controlling, coordinating and regulating the work of procuring and disbursing materials in accordance with the -inventory.

Educational material resources management: is the aspect of managerial functions concerned with the planning, acquisition, allocation, distribution and controlling the proper use as well as maintenance of education.

Utilization: is the act of putting into use.

Administrative staff/ supportive staff: are members, which include section or supportive department heads, stores/property administration personnel, registrar -personnel, librarian and secretaries.

Academic staff: includes directors, vice directors, department heads, teachers and laboratory technicians.

1.8 Organization of the Study

The study is organized into five chapters. The first chapter deals with the background of the study, statement of the problem, objectives of the study, significance of the study, delimitation of the study, limitations of the study, operational definition of the key terms and organization of the study. The second chapter covers review of related literature of the study. Chapter three deals with the research design and methodology, chapter four covers the analysis and interpretation of data collected and chapter five deals with the summary of the major findings, conclusions and recommendation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The study mainly emphasized on “the management and utilization of material resources in secondary schools of DeraWoreda.” Therefore, the review of the related literatures attempted to indicate the main components of materials resources management and utilizations. So the review of related literature attempted to show the definition and history of educational material management, the objectives of purchasing in concern to store management, the goal and objectives of material management, efficient utilization and distribution of material resources and maintenance of materials according to the basic question and objectives of the research using published and unpublished materials.

2.1 Concept of Education Resources

Resources are defined as something that lies for use or that can be drawn up on for help to take care of a need (Amos, 1999). Resources are the vital ingredients for the existence of any organization. Thus, any human activity is badly depending on resources such as: human, materials, time information, and financial resources. In this regard, Sadiwale (2007) in Mengistu (2015) indicate, that resources are the only tools through which organizational tasks, productions, services and satisfaction ends are attainable. Like any other organization, resources are major inputs of educational systems in schools. To facilitate school administration and make the teaching- process easier, education resources refer to all human, material, audio-visual school environment, and community materials available in a learning setting. Additionally, they contain additional essential school supplies that make teaching simple and increase students' understanding of what they are studying. Education resources include all written, built, photographed, electronically operated, or otherwise created assets that are used in the teaching and learning process, whether they are related to humans or not (NTI, 2006). The community at large, the school's teachers, genuine things, specimens, or models, chalk and display boards, school buildings and layouts, and other basic supplies like pencils, pens, exercise books, etc. are all examples of education resources.

Educational tools are crucial to the creation of a positive teaching-learning environment. The teacher may receive more meaningful and effective guidance from using these resources than from any independent attempts made without the materials. Education resources are not only scarce in school administration, but they can also be successfully and efficiently handled if management tasks are adequately harmonized, organized, coordinated, and controlled the school management team. Resources are one of the most important components in achieving goals in any educational institution, as was said before.

2.2. Material Resources

Materials resources are items acquired from the environment to enable the organization to carry out its function. The term material resource has been defined by various experts in various ways. Bezabeh (1990) defines materials as the whole range of goods and service which are purchased or otherwise procured sources outside the organization, and are used or processed or distributed in order to provide finished products of other products, which include energy and specialized services, raw materials and merchandise for resale. Materials resources are the life blood of any organization (Ahuja, 1993). However, different organizations utilize different types of material resources depending in the objective they are established for. For instance, in industrial organizations, the most commonly used materials are raw materials, finished goods used as an input to the operations process, materials used for maintenance, spares, partly finished works (work in progress), items used in administration (such as stationary), and finished stock ready for distribution to the customer (Knight, 1993).

Materials resources are essential components to effectively conduct teaching and learning activity. They are also critical inputs in achieving educational objectives. Educational materials can be defined in several ways depending on the purpose of the writer. For instance, Mbamba (1992:154- 155) puts educational materials or facilities as “any object or unit areas of space so designed and organized deliberately to support and use teaching and learning operations.” He goes on explaining that they are designed, modified and prepared to assist teaching and learning operations. In connection to educational material resources, Bekuretsion(2005) states that material resources include renewable and immediate use items. Each item is used for specific objectives and the integration of all items can help to promote the teaching -learning process.

On the other hand, according to Mbamba (1992), some of the materials and facilities commonly used in the education system are: -

- a. Classrooms, laboratories, workshops, libraries, recreational space which serve to house instructional activities;
- b. Furniture (desks, tables, chairs, blackboards, etc.);
- c. Learning and teaching materials which act as source and/or channel from which a learner draws knowledge and acquires skills. These may include equipment for science, production technology, books, manuals, programmed instructions, educational media like radio, television sets, overhead projectors, other audio-visual aids etc. and
- d. Raw materials consisting of organic and inorganic materials, such as chemicals any specimen of plants and animals etc.

Generally, though different scholars defined and classified the concept of material resources differently on the basis of their understandings, material resources are the main inputs that assist the activities of teaching-learning process.

2.3The Functions of Educational Materials Management

The function of educational material management is expressed differently by different writers. For example, Gopalakrishnan (2005:175) discussed that educational materials management includes planning, purchasing, allocating, storing and controlling. According to UNESCO (1984:30) educational materials management functions include planning, distribution and control of the utilization of materials. In both cases, there is no overlooked function but they differ only in the way they treat each of the functions.

In any educational system (centralized or decentralized), the following four main functions have to be taken into account at different levels and decision making when dealing with educational materials and equipment. These are planning, supply and provision, distribution, control and utilization, allocation and purchasing, Gopalakrishnan and Sundareson (2003) also remains the importance of the following subsidiary functions: maintenance, training of administrators, users, and evaluation.

To sum up, in order to achieve maximum outputs in any institutions in general and in educational institutions particularly, deep understanding and implementation of the following major functions or activities of materials management is so crucial: procurement, warehousing, distribution, utilization and inventory control, etc.

2.3.1 Planning for Educational Materials Management

Planning is the continuous process of making present entrepreneurial decision systematically and without best possible knowledge of their futurity. Organizing systematically the effort needed to carry out this decision and measuring the results of this decision against the expectation through organized, systematic feedback in (Chandan, 1987). Thus planning requires understanding of the present status of the organization that enables to forecast into the future. Having adequate information about the past and present facilitates decision-making, of course the plan can be also relevant, and the implementation will be easier.

Therefore, Planning assists to have cleared direction regarding what to do, How to do, when to do; and hence enables to utilize the scarce resource effectively. As a result, managers are required to plan before do something. Planning relation to educational materials is a sub system in the overall planning activities and is defined as “...a decision making mechanism for designing the best possible alternative strategy in the use of scarce material resource are marked for the achievement of educational goals and objectives”(Mbamba,1992). It is obvious that educational institution discharge their responsibilities under serious shortage of resources. It seems due to this that planning in educational spot lights on the efficient use of resource. Thus educational institution has to plan for their material and equipment utilization for success full achievement of their goals. Material requirement planning, other than education, is exercised for operation improvement through cost control. The reduction of cost is mainly the cost associated with the acquisition and management of materials furthermore-other than cost minimizing the holding of inventory is also another aspect considered for organizational effectiveness (Wright etal, 1993) and (Bezabeh, 1990).

However, to prepare a plan which effectively bridges the gap between the present material status and future requirement is not an easy task. Hence these should be a system that enables together adequate and right, information at the right time for decision-making. Therefore, the manager has to develop management information system (MIS) responsible for organizing and systematizing

available information when carefully managed, MIS enables proper collection, handling and gathering of the necessary information, which facilitates effective decision making and implementation (Chandan, 1987). Beside this, Mbamba (1992) says, planning of educational material resources starts with the collection, compilation and analysis of data and information pertaining to the use of available resources.

As mentioned by UNESCO (1984:34), in the process of planning, in addition to the data for quantitative requirements of educational materials, the presence of qualitative information, standards of educational materials with respect to the education objectives of a country is essential. In this respect, many countries adapted a standard list of materials depending on their prevailing situation, chosen priorities and available options which countries may use as a basis for allocation of educational materials or simply use as a reference. Planning of educational materials should also be based on the budget allocated to the sector. However, this budget is dependent on the total budget allocated to education and the emphasis that educational materials attained in the system. In line with this, Woodhall (1985:189) points out that the minimum expenditure of a country for teaching material is 10% of the total educational budget. However, most developing countries are allocating below this level.

In Ethiopia, as Amare (1999:62) argues, educational materials did not get enough attention in the planning process by both planners and implementers in their action plans due to the problem of conceptualization. As evidence, he mentions the budget allocated by the country in the five years Education Sector Development Program (ESDP) plan. This is 6.8 percent out of the total budget of 12.2 billion birr. Therefore, availability and accessibility of data, priority or emphasis given to educational materials among other issue in education, availability of finance or total allocated budget for education are some of the factors that may affect educational materials planning.

As indicated above resources in educational are scarce, so through planning managers identify problem areas and prioritizes the problems according to their importance. Planning for educational materials management is based on the need analysis in school from department and other school staffs. But in some schools planning is occurred by school management only without participation of others.

2.3.2. Purchasing of Education Materials

Purchasing implies the act of exchange of goods and service for money, whereas procurement is a generic term with a wider connotation for the total responsibility of acquiring goods and services (Datta 1998:52). As of any other business terms, purchasing is defined differently by various experts. For Sharma, (2010), purchasing is the activity engaging for getting the right materials to the right place, at a right time, in the right quantity with a right price. Similarly, Chary (2000) defines purchasing as the process of buying materials for an organization with the intention of facilitating the entire activities so as to achieve the pre-determinate objectives or goals of that particular organization purchasing requires skill personal in order to facilitate the complicated procurement activities. As indicated in Leenders et al. (2006) purchasing, supply management and procurement are used interchangeably to refer to the integration of related functions to provide effective and efficient materials and services to the organization. Thus, purchasing should be done carefully and based on the pre-determined objectives.

According to Mbamba (1992:198), the primary purpose of purchasing is to facilitate the flow of resources from suppliers to an organization in order to help that organization achieve predefined goals. In a strict sense, "purchasing" refers only to the act of buying; however, in a more general sense, the term also refers to identifying the need, choosing the supplier, determining the appropriate price terms and conditions, issuing the contract or order, and monitoring the delivery process to ensure proper performance (Alijian, 1973:1).

These explanations show that purchasing is not a simple activity performed by any person. This indicates that the purchasing activity requires personnel who could make the proper selection of materials and services, follow up to ensure proper and timely delivery, inspection to insure quantity and quality and other important activities stated as above.

I. Purchasing Procedure

Dereje(2006) indicated that, the purchasing processes may vary according to the rules and regulations a country follows. Its basic aim is to ensure that what is needed is made available when it is required. The materials to be bought should conform to the established standards and more of instructions. But the procedure for procurement of educational materials may vary according to the nature of education; the essential steps are as follows:

- ✓ Ascertaining or recognizing the need for the material by using checkup of the available stock.
- ✓ Determining the quality of materials which will be required, regarding to the level of available funds.
- ✓ Deciding on priority basis in relation to the available funds.
- ✓ Drawing detailed specifications of the required items.
- ✓ Preparing and publishing tender documents.
- ✓ Analyzing the tenders to determine the prices, availability of materials etc.
- ✓ Based on the present proposal on the quality, quantity of items, reason able prices, de livery date, ability of supplier, etc. approving the tenders who should supply the materials.
- ✓ Awarding the contract for the supply of materials.

The procedures are the same with our context. But, there is a lack of analyzing the tenders to determine the prices, availability of materials. There is a section or department responsible for discharging such responsibility, i.e., the purchasing department. It monitors the quality, quantity, timing and price of all materials purchased. Therefore, purchasing department has to satisfy the material needs of other departments depending upon the frame work of organizational policy, procedures and objectives.

II. Time for a purchasing

Timely purchasing is one of the major activities of the purchasing function. According to Gopalakrishnan(2005), to determine the right time, the purchaser should have lead time information for all products and analysis of its components. The right time means the time when the stock reaches the minimum level; any under delay on effecting delivers or issues defeats the objective of material management (Candoli, 2004)., If educational materials are not provided timely, it negatively affects the whole educational process and quality of education. Sometimes early purchasing may create shortage of storage places. For this reason, the purchase requisition time of educational materials should be determined beforehand and be communicated to departments, sections or units of a system (Harris, 2008). One of the main responsibilities of the purchasing function is timely purchasing. According to Gopalakrishnan (2005:174), the buyer should receive lead time information for all items and analyze its components in order to determine the appropriate time. Naturally, lead time includes the entire period of the materials cycle, which includes production, transportation, and inspection.

The teaching-learning environment and level of education suffer if educational materials are not made available when they are needed. The buyer should be aware of how long it will take for the materials to get to the users from the time the need is identified in order to make timely purchases. It is not always the delay that creates a problem to a system. When early purchases are made, storage space issues can arise. For example, right time purchasing is important and advantageous for facilitating smooth operation of a facility or organization (Harris, 1985:183). For this reason, the purchase requisition time of educational materials should be determined beforehand and be communicated to departments, sections or units of the system.

III. Determining the Right Price

As mentioned by Candoli (1984), in identifying the optimum price of purchased materials, there are three types of discounts which concern the purchaser. The first is trade discount which is set by vendors on the basis of their classification of customers. Thus, the presponsibility is making his organization in the most favorable classification of customers. The second is bulk purchasing which offers lower unit prices. Here, the buyer's responsibility is to adjust ordering practice to the most advantageous quantity price break. The third is negotiating which is striving in making agreements that help the organization in saving money like seeing that proper cash discount terms are incorporated in the order, securing invoices promptly from vendors, processing invoices promptly and getting them to the proper paying agent and securing extended discount privileges when unavoidable delays are encountered. These are some of the way purchasers try to reach the right price.

Therefore, purchasing personnel or department is essential in an organization not only for acquisition of the right quality and quantity of material but also to have it in an economic condition. To this effect, identifying materials with possible low cost is usually one of the responsibilities of purchasing department or personnel.

IV. Identifying the Right Source

According to Curly (1968) quality is the sum total of characteristics or attributes of a certain materials, product or part that makes it acceptable by the people. To this effect specification plays a great role. Specification for an item to be purchased describes in clear and concise terms the characteristics of what is to be purchased and the condition under which the purchase is to be made. The purpose of specification is for quality control. Moreover, Balogun (2001) pointed out

that though decision regarding quality and brand are made in corporation with purchasing agent special for educational materials such as: textbooks, supplementary reading materials, charts, furniture, model or tools etc., the decision has to be made by some instructional official or committee of teachers or educational personnel.

Therefore, the selection of right supplier provides great importance to the educational establishment. For instance, it contributes to the success of the objectives of the establishment. The major concern in relation to the right source is the dependability and capability of suppliers in providing the required items. In order to be sure that the source of our purchase is right, it would be necessary to evaluate suppliers in terms of technical efficiency and organizational capacity in providing the required material.

V. The Right Quality for Educational Materials

The idea of right quality suggests that the quality should be accessible, measurable, understood, and achievable. Sampling plans for incoming materials examination on the quality of a product would be helpful. The quality information is typically found in the indents, and past experience shows that a large percentage of the indents created by user departments are almost always lacking crucial information. Such incomplete indents often cause unnecessary delays in procurement as the indenter has to be referred to and, if not referred results in heavy rejection. If the suppliers consistently fail to meet the quality requirements, then the firm may decide to make the item to find out whether such exacting quality requirements are necessary at all. It may mean specialized procedures, tooling, skilled labor and inspection standards. Another important aspect is whether the buyer is able to make the item to such quality standards when established vendors are unable to do so (Gopalakrishnan, 2005:175).

Quality, according to Datta (1986:20), is the whole of the traits or qualities that give a specific material, product, or component its appeal to consumers. Beyond fulfilling the intended purpose, the quality that the users find acceptable plays a significant role in enhancing the productivity and morale of the workforce. Currently, a large number of firms are working to create educational materials of the same type but in various quality levels. Therefore, while purchasing educational resources, there should be some standards by which to evaluate their quality. The role of specification is crucial in this regard. The description of an item that is to be acquired provides a clear and succinct explanation of both its specifications as well as the circumstances

under which the purchase is to be made. Specifications are used to ensure quality. However, non-essential quality requirements that do not add to utility should be eliminated from specifications descriptions because they could increase costs Candoli (1984:209). Quality should balance the technical needs with the economic situation as well as stress the technical specifications. Setting minimal requirements that could be taken into account during purchase could at least help to preserve this equilibrium. However, this circumstance can force the selection of minimal requirements that users might find unacceptable.

In this regard, Datta (1986:124) warns that even though there is a need to balance technically required materials with the economic condition it should not lead to the change of required material without the consultation of the users. Though decision regarding specific quality and brand are made in cooperation with purchasing agent especially for instructional materials like textbooks, supplementary reading materials, charts, model or tools, the decision has to be made by some instructional officials or committee of teachers or educational personnel. Mocoy (1961:338) .This is the case, in a condition where the education system is more decentralized, this becomes sometimes heavy for there may not be sufficient data at their disposal and lack the required adequate training to do so. Lists of instructional materials that match the national educational goals should therefore be created centrally or regionally, where there is access to knowledgeable staff and information about the most recent educational materials available on the market.

VI. Purchasing Policy

All organizations have their own policies, whether they are documented or not. A set policy eliminates the need to constantly make new decisions in emergency situations. A written policy assures that decisions and actions will be consistent, and a statement of such a policy that has been approved gives buyers authority (Sharma 2010). They have also distinguished three different purchasing policies. These are:

- a. Speculative Vs conservative: For speculative buying, large orders are placed all at once for bulk purchases, but for conservative buying, smaller, more frequent orders are used.
- b. Concentrated Vs diversified under concentrated purchasing the number of sources on which a while seller or retailer may depend for his/her supplies may be very few or limited. However, in the diversified purchases, buying is made from a large number of sources.

c. Reciprocal buying policy: - this is to place an order with a seller who is your customer.

In Ethiopia, there is a written guideline of purchasing educational materials. However, purchasing activities made in the system lack uniformity and create difficulty for the proper control and management of resources available. Moreover, according to this guideline the major part of purchasing made such as a bulk of purchasing and most foreign purchase were only the responsibilities of MoE. Now a day, Woreda FEDO had been given the mandate to make most of the purchase. Besides, schools are given the opportunity of small purchasing from their internal income (MoE, 2006; Taffese, 2007). To sum up, on the basis of the education policy in school, principals and administrators should develop comprehensive and specific job descriptions for their purchasing personnel. Clear purchasing policy manual can help schools to be effective for decision making or methods of handling particular situation. And purchasing personnel's should be clear in programs of the school system.

Additionally, schools have the option of making small purchases with their own funds (MoE, 2006; Taffese, 2007). In conclusion, principals and administrators should create detailed and clear job descriptions for their purchasing staff based on the educational philosophy at the school. Schools can benefit from having a clear manual on purchasing policies to guide them in making decisions or handling certain situations. Purchasing employees should also be made obvious in school system programs.

As it is explained above purchasing of educational materials in schools have its own mistakes. There is a lack of need identification; the stock is not reach on the time and lack of identification of proper price. Sometimes purchaser may buy materials without bidding and guarantee service.

2.3.3. Allocation and Distribution of Educational Materials

I. Resource Allocation

Resource allocation according to MoE (2013) is used to assign the available resource in an economic way and it is part of resource management. In strategic planning, resource allocation is a plan for using available resources. Allocation of educational resources refers to transporting, sending or giving out of resources from a store/warehouse where they are needed, and in turn allocated to smaller groups such as teachers and students for use in class (Dereje, 2007).

Regarding allocation, Morrison (1998) has the following to indicate: In accordance with manufacturing schedules, some materials may be received on a programmed delivery basis and keep for use only on the proportion line for which they are being purchased. For allocation of educational materials UNESCO (2006) stated the following major criteria. The size of the system, the amount of materials available and using measurement units like size, total enrollment, cost per capital and teacher/pupil ratio. Moreover, equity is the important issue in allocation of educational material resources. It significantly concerned with treating individuals or institutions with standard of what that reflects basis senses of fairness. Accordingly, it means, equity means fair distribution of educational material resources.

II. Distribution of Educational Materials

Distribution is concerned with getting goods from a Manufactures to consumer. It usually involves substantial expenditure for warehousing and internal materials handling. In the words of Morrison (1998) educational materials distribution involves the movement of educational materials from the warehouse facilities to the requesting institution or unit. Educational resources once received and processed in to storages, should be handled properly and distributed to their destination. Melaku (2010) “Distribution refers to those activities involved in physically moving materials from point of receipt to point of storage or use.” The main purpose of distribution is to facilitate the education system in obtaining the required amounts of resource on time with proper care and safety. He further discussed the distribution function may face some hindrances due to shortage of transportation, financial and materials constraints. Such problems may happen from failure in doing the expected managerial functions properly.

Taking the Ethiopian context, the Ministry of Education has organized a semi –autonomous agency regulation no.50/1999 called Educational Material Production and Distribution Agency which is charged with the responsibility of providing educational materials through production, or procurement locally or from abroad .But some reasons that contribute delay and imbalanced distribution of educational material these include: Inaccurate need requisition resulted from inaccurate data, Failure to submit requisitions on time, Lack of knowledge of the correct needs requisition, Absence of professional personnel in the planning activity of educational materials, Absence of adequate storage so that the ware house personnel is obliged to free the space; etc. due to this, unnecessary distribution that doesn't consider time and need may occur.

In conclusion, it is clear that effective and efficient distribution required timely distribution with optimum cost, good planning, appropriate ware housing, and trained personnel.

2.3.4 Maintenance of Educational Material Resources

Teaching materials and equipment of Schools served for many people's at large throughout the year by the Teachers and students. Due to this and other reasons teaching materials need continuous maintenance and follow-up.

Ray, 238) et.al (2001:stress the point that maintenance enables the provisions of services without stoppage and in addition Elmo (1963), defines maintenance as continues process of repair and replacement of pieces of property whether grounds building or equipment as nearly as possible to the original condition of completeness. It also goes further and includes good care and wise use of materials and equipment in a proper way. According to Harries (1988:209) maintenance function is seen as a layman's job and managers usually undermine its importance. It helps in protecting further damage of the resources and lays a good ground for reuse, which offer wise, demand or force to buy the newer one, that is of course costly for the organization. It refers to "the logical service involved with a school plant, an auxiliary structure, or an item of equipment in a series of systematized function". Technical and Vocational Education and Training Institutions facility operates and maintenance quality learning. The major business responsibility is to ensure that through the provision of quality maintenance service that the student has an environment which is safe, health and environmentally friendly (MOE, 2005:3)

Maintenance function should be considered during initial planning. In Integrated of maintenance function into the overall planning stage enables it proper management and implementation with its allocated budget. However, careful purchase will be reducing maintenance cost.

III. Types of Maintenance

Harris (1985:213) divides the maintenance role into four categories:

1. Preventive Maintenance Program: This kind of maintenance focuses primarily on both facilities and equipment. Preventive maintenance's major objective is to give an object the care it needs to be operational or to be preserved for a longer period of time without expensive repairs

or wasted labor hours. Additionally, it shortens the period of time when the tools or materials are idle.

2. System Maintenance: This sort of maintenance requires meticulous planning. At the time stated, replacement, rebuilding, repairs, or service will occur.

This kind of maintenance includes pre-programmed procedures that significantly reduce total time loss, money loss, idle labor, and production downtime.

3. Setup maintenance: Some organizations in this situation have a separate department or branch that is in charge of repair and replacement. If a breakdown or stoppage occurs, the setup person promptly takes action. He also helps folks who are unable to use certain machines and pieces of equipment

4. Crisis Maintenance: as the name indicates, such maintenance takes place after the equipment or the material has been damaged.

2.3.5 Warehousing/Store keeping Educational Materials

According to Ehiamentalor (2003), the process of shop housing entails creating and achieving goals through store management activities that make use of commodities, money, and human resources. According to Melaku (2010), warehousing or storage functions involve holding and caring for instructional materials and supplies while they are distributed or disposed of. This means that the store manager in a school is in charge of each type of educational material through accurate material identification, effective material handling, and protection of materials from spoilage in the warehouse. In addition, the store manager oversees the activity of materials during receiving, issuing, and controlling materials recorded in the ledger in a systematic manual.

Even though this is the general idea, most shop managers at Ethiopian schools are not professionals, and occasionally they even lack the most fundamental understanding of warehousing (Solomon, 2005).

2.3.6 Utilization of Educational Material resources

Educational material resources are vital if they are in good working condition at all times for their effective and efficient use. Knight (1993) regarding the utilization of resource stated,

training institutions have a great duty and responsibility in managing, utilizing and controlling human, financial and material resources for better performance. Moreover, Gopalakrishnan (1998) defined proper utilization of material resources as the function responsible for the coordination of planning, sourcing, purchasing, moving, storing, inventory and controlling materials in an optimum manner so as to provide pre-decided services to the customer at a minimum cost.

Moreover, Saxena (2003) indicated that the proper utilization of educational material resources for a given application is very essential for the following reasons. These are: for the completion of the job in minimum possible time, for the completion of the work without damaging the equipment, thus ensuring safety of the equipment, to do the work with less effort and less fatigue, to avoid chances of accidents, and to provide safe operations. As reported in Bekuretsion (2005), optimum utilization of available scarce resources and prevention of all types waste are required by adapting scientific system of management and controls of materials. Proper utilization of material resources refers to the utilization of material resources effectively and efficiently to sustain organizations as an organization and to accomplish its objectives. Ehiamentalor (2003) stated that, the discipline of school business administration concerns the utilization of available resources, which are scarce in relation to the need to achieve the goals of the education. Therefore, if the materials utilized properly, it will guarantee the attainment of planned goal (UNESCO, 1984). This indicates that proper use; directing and controlling materials are important managerial functions in materials management.

According to Adesina (1990), the availability of educational resources is very important because of its role in the achievement of educational objectives and goals. Furthermore, the extent to which an organization like educational institution attains their objectives is directly proportional to the educational resources available and their utilization. Hence, to realize the expected educational goals and objectives, it is essential to make available the material resources and to ensure the effective and efficient management and utilization of materials. Accordingly, resource utilization is the main emphasis in school management that finding efficient and effective ways to utilize the existing limited materials in the schools.

In general, any schools concerning material resources due attention gives to its management and proper utilization by stake holders like teaching staff members, administrative staff members, etc. Indeed, management and utilization of material resources requires knowledge, skills, dedication etc., of the above stake holders of the sector to utilize and control properly. So that, such type of gaps will fill through training, working together, etc.

2.3.7 Inventory of Educational Materials

It is clear that one of the functions of material resources management is inventory control. Regarding to this, many writers define the concept of inventory. For instance, according to Datta(1998:193) inventories are defined as, “stock of materials of any kind stored for future use, mainly in the production process.” In addition, Mahajan (2002), defined inventory control as “The scientific method of finding how much stock should be able to provide right type of materials at the right time in the right quantities.” Chary (2000), on the other hand, states that inventory is needed for the uncertainties involved in the usage or availability of the materials. Thus, it ensures that one stage of production does not suffer because of the non-functioning or mal-functioning of the previous stages of production over which the former is dependent.

Inventory is the stock of any item or resource used in an organization. Evertte (2003) states that the basic reason for carrying inventories is that it is physically impossible and economically impractical for each stock item to arrive exactly where and when it is needed exactly. He stated that inventory is crucially important to almost all business or organization whether it is product or service oriented. An inventory system is the set of policies and controls that monitor levels of inventory and determine what levels should be maintained, when stock should be replenished, and how large orders should be (Jacobs, 2008). Inventories and material resources management are, therefore, most important activities in the school program. As a result, a great attention should be given for their accomplishment.

Inventory control provides storekeepers with information about educational materials that are in use or in storage. Hence, in the absence of careful inventory control, there could be inefficient use of the materials and wastage of financial resource by making unnecessary purchase. Inventories are kept in order to be certain that regularly used supplies and equipment are always on hand and that there is no over stocking or under stocking (Condolie et al, 1984). Furthermore, inventory system of materials intended to guarantee the proper use of limited resources, to

measure the success in achieving the objectives and also to settle the continuing relevance of limited resources in a changing situation (UNESCO, 1984:14).

In conclusion, inventory control is responsible for keeping detailed records of parts and materials in the material for operation of educational activities, these resources need a continuous control to make available information, ideas, methods and convincing data required for pertinent decision making. Proper utilization, effective controlling mechanism and timely efficient inventories of educational materials are vital to facilitate and promote quality of education.

2.3.8. Obsolete and Surplus Materials Management

In recent years disposal problems become more complex and important as companies have become larger, more diversified in product lines and more decentralized in management (Solomon, 2005). In relation to this idea, Naire (1990) indicates that there are items which are out of date; mostly superseded by a later design and are known as obsolete items. In education, the most challenging activity is material management disposition of obsolete, surplus and scrap materials.

Tadesse (2005) defines obsolete, surplus and scrap materials as follows: obsolete items are those materials and equipment which are not damaged and which have been economic worth but which are no longer useful for the company's operation owing to many reasons such as changes in product line, process, and materials and so on. Surplus items are those materials and equipment which have no immediate use but have accumulated due to faulty planning, forecasting, and purchasing. However, they have a usage value in the future. Scrap is defined as process wastage, such as turnings, borings, spruces and flasher.

Goitom (2002) stated that obsolescence of materials may be caused in many ways. Some of the major factors for obsolescence are technological changes, supplies or material receives but no longer needed, no longer being used at the rate anticipated and change in curriculum that may result in making text book and other instructional materials out of use.

These condition forced educational materials to be posed. The other is the ideal way of disposing of excess material is to transfer them to another school or institution where materials are not accessible. Donation or selling is also the most cost effective approach of disposition.

In general, disposal of obsolete and surplus materials is one of the challenging problems in school materials management. This implies that attention should be given by school leaders in collaboration with stakeholders to remove or discussed on how to reuse these resources in their respective schools.

➤ **Disposition**

Based on the works of Gopalakrisnan (2005:180), “disposal action follows when the scrap cannot be utilized within the organization”. According to MoE (2013) disposition can be realized through selling, transfer and disposal. In no way government owned property could be taken for private use. Before making a single decision of disposal, educational institutions must examine a number of options. For instance, instructional supplies that are extra or outdated for one activity might be required for another activity. As a teaching tool with minor modifications or might be desperately needed in other schools.

Therefore, it is more beneficial in this sense to transfer extra materials from one institution to another. Due to a lack of managers with sufficient training and basic understanding of warehousing, educational materials are not handled or cared for in a proper manner in stores. The community, teachers, students, and others are not clearly involved in the disposition of materials; instead, the school principals decide with two or three PTA members.

2.4 Stakeholders in the Material Resource Management

According to Ojo and Olaniyan (2008), the school principals must work with the staff to determine which supplies and facilities are needed for the attainment of educational objectives. He also plans with the staff for effective use and maintenance of existing supplies and facilities. Therefore, the vice principals as well as the heads of department of each department should take up or assist the principal in discharging these duties for effective teaching and learning. Moreover, the principal in collaboration with teachers and non-teaching staff of the school should ensure the appropriate registration, utilization, maintenance and management of school resources. They should be able to provide documentary proof of any operations relating to the management of school material resources. The resources, land, buildings (classrooms, administration block, toilets), furniture (desks, chairs, tables, stools) equipment (office, classroom, games, kitchen), stationery, books and other teaching/learning materials (audio

visuals, TV, video, radio, tape recorder) are largely form the asset base of any given school (Obondohet al., 2005).

Educational organizations under take the management functions in a collaborative structure, consisting of various partners. In connection to this, FDRE (1994) states that “Educational institutions will be autonomous in their internal administration and in the designing and implementing of education and training programmers, with an overall coordination and democratic leadership by boards or committees, consisting of members from the community (society), teachers and students”. This indicates that the school as an organization as well as its material resources properly managed and utilized through the coordination management of the school principal, vice principal(s), PTA members, teachers, non-teaching staff, and students.

2.5 Material Management Policies and Guidelines

The delineation of power and responsibility is made possible by a materials management policy and guideline that are clearly defined. Gopalakrishanan and Sundareson claim (1998:177). The following areas should be governed by explicit policy.

- A. Organization: Acceptance of integrated materials management itself is a major policy decision.
- B. Policy must be clearly laid down in with regard to source development, etc.
- C. Store: procedures must be established for receipt, inspection, handling, storage issue, stock verification etc...
- D. Policy manual in view of the complex nature of the materials management function and its importance contribution a policy manual covering all aspects of materials management.

The above policies and guidelines are also important in schools to avoid confusion that may be rise interdepartmental activities and also facilitates uniform and consistent action in various activities. Regarding this issues, school principals are responsible for the administration of materials resources in the school. Teachers also approve the material condition in the class. MoE (2013) stated the responsibility of principals and teachers as follows:

✓ **Principal’s responsibilities**

Compliance with guidelines that all staff is familiar with the substance of these guidelines, that all staff are familiar with school specific procedures for selecting appropriate teaching learning resources.

✓ **Teachers’ responsibilities**

Teachers are responsible for using their professional judgments in selecting appropriate resources in accordance with any school specific procedures and guideline. Teachers have a right to hold views on issues and to express them, in appropriate forums. In principle any material property (purchased, donated contributed by the community and like) should be received by using legal receipt. This is also true for the outgoing materials. The major models that help to receive and pas materials to an employee are the following.

Table 1: Type of model and their function

No.	Type of model	Function
1	19	used when submitting materials to a store
2	20	Request to withdraw materials from a store
3	21	used to give a material request approval
4	22	Helps to withdraw materials from a store

There are additional manuals and procedures related to material management in addition to these. For instance, MOFED created the government property management Article 3/2003 and the Stoke Management Manual's Article 17/2002 on purchasing and material management. In light of this, school administrators and the school community should work together to ensure that those limited resources are used and managed in accordance with the established guidelines, policies, rules, and regulations. The availability of materials resources will help to set certain control mechanisms that the school community will use. School principals should be open to information regarding the acquisition, allocation, distribution, and application of materials resources.

Therefore, on the basis of the guidelines of material resources management, the school principal, vice principal(s), PTA members, teachers, and non-teaching staff have to play their roles for the effective and efficient utilization of material resources.

2.6 Challenges to Effective Management and Utilization of Educational Materials

I. Funds:The main issue is undoubtedly how to pay for education. This is true because the type, suitability, and administration of financial resources have a significant impact on the nature, quality, quantity, and efficacy of the educational system. Ethiopian schools struggle with inadequate management and financing in this area. Nebiyu (2000).

II. Lack of Accurate statistical Data of Educational materials

Maintaining accurate records of educational resources will aid in managing their use and achieving educational goals. Most school administrators do not provide precise and trustworthy information about the caliber and quantity of available educational materials (MoE, 2006).

III. Poor maintenance cultureFacilities and educational materials are not adequately maintained. Administrators prefer building new classrooms instead of maintaining the old ones. Laboratories and their equipment are allowed to waste, text books and other instructional materials are exposed to rot away in the cartoons rather than displaying them on their proper place/shelves for easy retrieval and usage (Tafesse, 2007).

VI. Capacity of personnel's to manage and use educational materialsMost personnel's, principals and teachers are unable to update their knowledge through trainings, workshops and conferences. They lack access to current journals, textbooks and internet facilities. They, therefore, rely on their old text books, notes and materials. This lack of exposure, negatively affects the wise utilization and management of educational materials (MoE, 2006;Dereje, 2006).

V. Absence of Professional to Manage and Use Educational MaterialsThis is very critical problem in most Ethiopian schools which affects the quality of education negatively. Due to this, most schools suffer from getting the quality educational material though there enough budgets (Solomon, 2005).

2.7. Experience in Materials Resources Management in Different Countries

According UNESCO (cited in Biruk 2008), research was made on educational materials condition of four countries. One from Africa (Galena) two from Asia (the state of Madhya Pradesh in India, and the province of Zhejiang in China) and one from Latin America (the state of pueblain Mexico). In that study variation in the size of each institution, variation in the quality of school infrastructures variations in the educational means available to teachers and variation in the conditions of comfort offered to pupils for study, were the major points included in the study. From the study on these four countries, the quality of school infrastructure or the quality of their physical attractiveness varies from country and from one zone to another. Variations were also observed from urban to rural areas. There were schools without buildings, safe drinking water, playground and decent sanitation, not even a blackboard. These infrastructures with no doubt have affected the quality of education.

According to UNESCO (cited in Biruk 2008:51) the study dealt with questions such as “With what means teachers should have to carry out their jobs?

What equipment they could use in 35 their classes: whether they regularly received updated guides or pedagogical documentation to help them prepare their courses?”

These all factors under which teachers work, had a significant influence on their motivation. In this respect, the distribution of educational means made available to teachers (like blackboards, chairs, desks, storage cupboards, geographical maps, science posters and others) were included in the study. As a result, availability of those educational means improved the quality of education.

Generally, from the study the following points had been concluded. The materials conditions of education had an impact on the work and the motivation of teachers. Educational materials were also an important factor in academic success of learners. The materials conditions vary by country as a function of its development and at the resources that the country can devote to school education. Any other measures aimed at improving the quality of education were assumed simply by a waste as long as these conditions were not fulfilled. However, in each of these countries observed there were extreme varieties of situations.

2.8. Educational Materials Resources Management in Ethiopia.

Scholars have not reported nearly enough research on Ethiopia's management of educational materials relative to its importance. No researchers have been done on the management and utilization of educational material resources in higher learning institutions in Ethiopia here before. However, there are some works on TVET schools financial educational materials resources management (Haileselassie, 1995) and on the availability and use of instructional materials in primary schools of Tigray region (Amare, 1999). As a result, much cannot be said on the management practices of educational materials resources in Ethiopian secondary school. However, the following features of school materials resources management were reported in Ethiopia (Worku, 2007; Haileselassie, 1995, Tafesse, 2007).

1. Attention is not being paid to existing school facilities and equipment. Most school facilities and equipment are exposed to theft, rain and dust.
2. Most schools lack adequate facilities like library, bookstores, workshops, laboratories, classrooms etc.
3. Most schools did not take regular inventories. They do not give report regarding the condition of their materials status.
4. Schools lack comprehensive directive and finance for maintenance and renewal.
5. Most schools do not have appropriate personnel dealing with the management of materials resources.
6. Learning materials that enhance students' achievement, such as text books, are not properly handled.

Abraham (2001) on his part reported that the training status of teachers, teacher's attitude and commitment, financial and materials support called foster or hinder the effective preparation and utilization of educational materials at school level. The above research has been done with different regions of Ethiopia. Moreover they indicted that there were problems in the management and utilization of educational materials resources in the country. As a result, the teaching learning processes were affected by this activity.

Therefore, the need to conduct a search on this area also comes from the need for better management and utilization of material resources in an organization. Furthermore, according to the observation of a researcher, the management and utilization of implementation of materials

resource in secondary schools of DeraWoreda needs improvement. This encourages the researcher to focus on this topic and conduct a research then recommend what should be done in the area of procurement and property Administration department in secondary schools of DeraWoredaOromia Regional state.

Summary of Review Literature

Educational resources are central to the educational process because they play an important role in the achievement of educational goals and objectives since they facilitate teacher's work and accelerate learning on the part of the student (Usman, 2007). School material management is defined as the function of taking responsibility for the coordination of planning, purchasing, moving, storing, and controlling materials in an optimum manner to provide a pre-decided service to the customer at a minimum cost (Harris, 2008). Similarly, Nebiyu (2000), also states the functions of educational materials management as the coordination of planning, purchasing, moving, storing, and controlling materials in an optimum manner to provide education service at a minimum cost. To summarize, material resources management is concerned with conscious involvement in the quest for obtaining appropriate materials that are needed to operate organizational operations, as well as optimum use of the procured material resources to achieve organizational objectives efficiently. Many scholars define material resources in different ways viewing them from their educational perspectives and philosophical backgrounds. For instance, Olele and Nwabueze (2015) defined material resource as a potent factor in quantitative education delivery, and they include instructional materials (such as textbooks, audiovisual, software, and hardware devices), and facilities such as classrooms, tables, chairs, chalkboards, shelves on which instruments for practical are properly utilized.

Therefore, this study was necessary to assess the availability and utilization of textbooks laboratories and libraries in influencing performance in secondary schools in Oromia Regional State of DeraWoreda.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

A detail discussion about the research design and methodology was made in this chapter. The study area, research design, data source, sample size, sampling method, data collection tools, data collection procedures, and data analysis techniques are all discussed. These points were presented below.

3.1 Study Area

The areas selected for this study were five secondary schools, which are found in DeraWoreda. As a result of his exposure, the researcher had better access to different information sources and knowledge of the site that help to get rich and deep data to understand the issue under study.

Table 2: list of secondary schools in DeraWoreda

No.	Name of schools	CRC
1	Ceka Genet	Ceka Genet
2	Salaish	
3	Bitotessa 17	Bitotessa 17
4	Racho	
5	Tuti	

3.2. Research Design

The selection of research design was believed to depend on problem to be investigated. Therefore, descriptive survey design was employed in this study. The technique enables the researcher to look at the situation as it stands and pinpoint some of the significant issues with the administration and use of educational resource resources.

Both quantitative and qualitative research methodologies were used in this research. However, Spratt, Walker and Robinson (2004) suggested that, combining quantitative and qualitative methods sounds like a good idea. Combining several strategies helps make the most of each one's advantages while minimizing the weaknesses of each. Moreover, this approach was

important in complementing the limitations of each method by another; hence the researcher employed mixed research method.

North Shoa Zone DeraWoreda secondary schools were chosen as the research site because the researcher has better access to different information and better knowledge of the site that helps him to get rich and deep data to understand the issue under study well, since it is a work place of a researcher.

3.3. Source of Data

There are two sources of data for this study. These are primary and secondary sources. The primary data sources were Department Head Teachers and Administrators and Support Staff and Woreda education office Heads and CRC Supervisors. These participants were selected because they directly or indirectly participate in planning, organizing, utilization, purchasing, controlling, warehousing and maintenance of school material resources. While secondary data sources were pertinent documents like guidelines, rules for different grade levels, and journals.

3.4. Sample and Sampling Technique

The target populations in the study include the school principals, vice principals, department head teachers, school supervisors, store keepers, purchasers and Woreda Education Office heads. In this Woreda, there were 6 secondary schools (9-12) with 203 teachers and 3669 students. The study was conducted using non-probability sampling strategies and includes all five secondary schools in the Woreda. The researcher has taken all the five secondary schools of the Woreda for the study and include all 11 principals and vice principals, school supervisors, store keepers, purchasers and Woreda Education Office heads; because, the researcher believes that they are informative about the topic, since they were the leading actors in the issue under investigation. Accordingly, there were two groups of respondents for the questionnaire. The first group (school administration and support staff) comprises five principals (one from each school), six vice principals, five store keepers (one from each school), and five purchasers (one from each school). The second group consists of all department head teachers (25) in the five schools.

On top of this, two supervisors (one from each CRC), two from WEO (WEO head and deputy) were selected purposively for interview because of their key position and experience. Finally, 25 department head teachers and 21 school administrators and support staff were selected for the

quantitative study for questionnaire. Therefore, total samples of 50 participants were chosen for the study. Consequently, the Table below displays the total population and sample size employed for this study.

Table 3: Population (P) and Sample Size (S)

No	Secondary schools name	Principals		Vice Principals		Department head teachers		Purchasers		store keepers		School Supervisors		WEO Heads		Sample techniques
		P	S	P	S	P	S	P	S	P	S	P	S	P	S	
1	Salayish	1	1	1	1	5	5	1	1	1	1	1	1			census
2	Cheka Genet	1	1	1	1	5	5	1	1	1	1					
3	Racho	1	1	1	1	5	5	1	1	1	1	1	1	2	2	
4	Bitotessa 17	1	1	2	2	5	5	1	1	1	1					
5	Tuti	1	1	1	1	5	5	1	1	1	1					
	Total	5	5	6	6	25	25	5	5	5	5	2	2	2	2	

3.5. Data Collection Instrument

For purpose of this study, three data collection tools were used. These were questionnaires, interview and observation. It is believed that using these tools was more appropriate for triangulating the data gathered, combining each instrument's advantages, and minimizing its disadvantages. As a result, the data collected through that would be reliable (Dawson, 2002).

3.5.1. Questionnaire

A questionnaire is a data collection instrument filled by research participants as part of the research study. It helps to obtain information about the thoughts, feelings, attitudes, beliefs, values, perceptions and behavioral intentions of research participants (Cohen & Morrison, 2007:370). According to Deliln& Brown (1993:15), a good rating scale should fulfill the following criteria: minimum response bias and high discriminating power ease of administration and simplic1y of the scale for the respondent to answer. In this study, respondents were asked to rate the level of management and of educational material resources using the 5 point Likertscale of agreement. By calculating the perceived results from the expected, the net

satisfaction can be estimated from the total for each respondent. Two types of questionnaires were developed for groups of participants. These were open and close ended questionnaires. Both open and close ended questionnaires were developed for group of selected respondents. The open-ended questions were placed in the first section as it made it easier for the participants to complete the questionnaire as they were not expected to write at length (Bryman, 2008).

The second closed ended questionnaire by the options given for the items based on scales. Furthermore, the use of open-ended questions also enabled the respondents to write a free account in their own terms, to explain and qualify their responses and avoid the limitations of pre-set categories of response (Cohen, et al., 2007). Similarly, interview questions were developed for some selected participants.

3.5.2. Interviews

To triangulate the data gathered through other instruments and to get in- depth information, interview questions were prepared, and face-to-face communications were made with school principals, CRC supervisors and WEO heads. In order to gather specific information regarding the research questions, interview guide questions were created in this manner. The discussion took place in English and Afan Oromo for supervisors and school principals to make the communication understandable, the analysis clear and to make the results reliable. The questions were also commented and improved in the same way as the questionnaires are improved.

3.5.3. Observation

An observation was made to obtain data that focused on the handling and functionality of schools' educational materials and their management as well as availability of policies and guidelines in the schools. A check list was used to facilitate the observation process. The observation at school level included observing the school warehouse, library, pedagogical center, classrooms, and school compound. Comments and improvement were also applied on the observation checklist.

3.6. Pilot Test

Before collecting data for this study, the researcher carried out a pilot study in Selekula secondary school which was not included in the sample study. In order to determine the effectiveness of the questionnaire, the researcher tested it on 32 participants. Pilot-test was

undertaken with the objectives to check whether or not the items contained in the instruments could enable the researcher to gather relevant information. Based on the feedbacks from respondents valuable improvements were made and irrelevant items were rejected. Piloting also helped the researcher to revise the research instruments and determine whether the respondents understood the questions. Then the cut-off point used for the five point Likert scale was below 2.50 very low performances, between 2.50-3.00 low performances, between 3.00-3.50 average performance between 3.50-4.00 high performance, while 4.00 -5.00 was considered as very high performance.

The reliability of the questionnaires was measured by using Cronbach's alpha method. Consequently, the Alpha results were 0.801, which indicated the questions constructed were measuring a similar concept highly. As suggested by Cohen, Manion and Morrison (2007) the reliability coefficient above 0.7 are generally found to be internally consistent. The researcher therefore concluded that the instruments were reliable.

Table 4: Summary of reliability test results with Cronbach's alpha

No.	Variables	No. of item	Cronbach Alpha
1	Stakeholders participation in material resources management	5	0.812
2	The extent of planning of materials resources	4	0.805
3	Quality of purchased material resources	5	0.752
4	Relevance of purchased materials for the teaching learning process	4	0.830
5	The transparency of the school purchasing system	2	0.788
6	Allocation and distribution of educational materials	3	0.798
7	Views on storage of materials	5	0.811
8	Inventory control	4	0.856
9	Availability and use of policies and guidelines regarding to educational materials management	4	0.762
	Total	36	0.801
	Average reliability result	0.8	

Source:Owen survey, 2022

3.7. Procedures of Data Collection

The procedure in the process of data collection involves some important stages. Initially, review of related literature was made in advance to get information on what has been done in relation to the problems as well as to develop instruments of data collection. Accordingly, through exhaustive exploration of various literatures in the area under study, basic question were formulated and data collection instruments were developed. All instruments were edited and modified with the help of the advisor. Before the administration of the questionnaires, observation and interview, the researcher contacted with the six secondary school principals of the Woreda to get their approval and cooperation. In the second stage, field work was conducted for administering the instruments and collecting the required data. Before approaching respondents for data collection, the researcher tried to get their willingness, then read the written consent to respondents and informed them about the whole nature of the investigation, and distribute the questionnaires by the help of principals. Similarly, the qualitative data collection procedure is also conducted by the researcher himself by interview and observation with potential informants. In the third stage, once the desired data were collected through questionnaire, interview and observation the research perceived to processing, and analysis of data obtained through these instruments.

3.8. Methods of Data Analysis

The data collected from the respondents were analyzed qualitatively and quantitatively. Data obtained through close-ended questions were presented in tables and analyzed using percentages, means values and frequency; while data obtained from open ended items, interviews and observation were analyzed qualitatively in summarized form and analyzed in narrative form together with the quantitative analysis of related questionnaire items.

3.9. Ethics Consideration

The ethical issues were given attention in the study. At the beginning a cooperation letter was received from the Department of Educational Planning and Management of Addis Ababa University. Then, the letter was given to Woreda education officers, and a consent letter was prepared by the researcher to help respondents make an informed decision. Rapports were created with respondents and were encouraged to feel free. In addition, participation in the study

was volunteer-based. Considerable efforts were made to keep participants anonymous and maintain maximum confidentiality. Above all, each source that was used in the study under investigation was acknowledged.

CHAPTER FOUR

4. PRESENTATION, ANALYSIS AND INTERPRETATION OF THE DATA

This chapter deals with the presentation and analysis of data gathered from groups of respondents using questionnaire, interview and observation. The questionnaire was administered to principals, vice principals, department heads, store-keepers, and purchasers the selected secondary schools while the interview was conducted with Woreda Education office Heads and CRC supervisors. In order to get more information an observation checklist was used in sampled secondary schools. The first part of this chapter deals with the personal information of respondents whereas the second section deals with the analysis of the findings of the study in relation to the basic research questions.

4.1. Characteristics of the Respondents

The characteristics and background information of secondary school department head teachers, administrators and support staff and WEO heads and CRC supervisors were presented below:

Table 5: Characteristics of Respondents

No.	Variables	Category	Frequency	Percentage(%)
1	Gender	Male	42	84
		Female	8	16
		Total	50	100
2	Age	Below 25	6	12
		26-35	34	68
		36-45	7	14
		46 years and above	3	6
		Total	50	100
3	Qualification	Certificate level and below	0	0

		Diploma	10	20
		BA/BSC	33	66
		MA/MSC	7	14
		Total	50	100
4	Service years	5 years and below	18	36
		6-10 years	20	40
		11-15 years	8	16
		16-20 years	3	6
		21 and above	1	2
		Total	50	100

As indicated in Table 1, 42(84%) of the respondents were male and the rest eight (16%) were females. This shows that the majority of the respondents were males, and the schools were male dominated.

Table 1 above shows that six (12%) of the respondents were below 25 years of age, 34(68%) were between 26-35 years of age, seven (14 %) were 36-45 age, three (6%) were 46 years and above. From this the researcher concludes that DeraWoreda high schools were dominated by 26-35 age groups, and only few respondents three (6%) were above the age of 46. Age is an important issue in teaching and learning process and in this study many of the respondents represented enough matured and well-trained manpower in the school. In this regard, the population included in the study was assumed to have some input to make in the realization and support of the management of educational resources in secondary schools.

In item 3 of the same table, respondents were requested to respond about their level of education (qualification). Accordingly, 33(66%) were BA/BSC and others 10(20%) were college diploma and seven (14%) were MA holders. This shows that respondents have good qualifications according to their academic performance to use and manage educational materials.

As to respondents work experience 18(36%) respondents had a work experience of less than 5 years, 20(40%) had 6 -10 years of experience, eight (16%) had between 11-15 years of

experience, three (6%) had 16-20 years of experience, and lastly one (2%) had 21 and above years of work experience. Generally, combination of different age, education level and service of participants in the study area were found to be satisfactory to get reliable data for the study.

4.2 Analysis of Data

4.2.1 Material resource management functions

This section emphasizes the presentation and discussion of data gathered from respondents on the management of educational material resources. Participants were asked to indicate how much they agreed with each of the five strongly agree (5) to strongly disagree (1) on the Likert Scale, and very high (5) to very low (1) on other topics that respondents were required to score. As a result, the responses of respondents were used to assess the questionnaire items. Responses with a mean value of less than 2.50 were classified as low, those between 2.50 and 3.49 as average, and those between 3.50 and 5.00 as high. To support and/or further the analysis of the findings, results from open-ended questions, interview questions, and an observation checklist were also qualitatively assessed.

The practice of materials management functions in secondary schools of Dera Woreda discussed as follows one by one. The functions include planning, purchasing, allocation and distribution, maintenance, utilization and inventory controls.

4.2.1.1 Material resource planning activities

It has been highlighted in the review of literature section of this article that planning for material resources is crucial for achieving any organization's overall goals and that good planning necessitates paying close attention to planning activities. Having this in mind, questions were presented to the respondents. The responses of the respondents indicated in the table 2 below and discussed respectively.

Table 6: Planning Activities of Material Resources

No	Items	Scales										Total		Mean
		SA		A		U		D		SD		N	%	
		F	%	F	%	F	%	F	%	F	%			
1	Planning of educational materials	6	12	20	40	11	22	6	12	7	14	50	100	3.24
2	Material planning correspond school's annual plan	3	6	8	16	6	12	22	44	11	22	50	100	2.22
3	Purchases are made based on the annual plan time schedule	2	4	6	12	9	18	29	58	4	8	50	100	2.46
4	Budget allocation for the provision of the required materials	6	12	21	42	7	14	9	18	7	14	50	100	3.2

Key: - SA =Strongly Agree, A= Agree, U= Undecided, D= Disagree and SD= Strongly Disagree Scales: < 2.50 = Low, 2.50 – 3.49 = Average, 3.5 – 5.00 = High

As depicted in Table 6, item 1, respondents were asked whether their school plan for material resources or not. Regarding this, the majority, 20(40%) of respondents reported agreement. The mean score for this planning activity is 3.24 which is found at the average range.

In relation to planning activities the data gathered through interview indicate that material resources plan was prepared independently but the plan was not well planned. According to the researcher observation, there was planning exercise of material resources in sample secondary schools, but it was planned without paying adequate attention on the overall educational material resource planning activities like need assessment, using the previous year inventory report, and etc.

Table 6, item two shows that the majority, 22 (44%) of the respondents disagreed on material planning corresponds with school's annual plan. The average rating for this item is 2.22, which falls into the low range. The researcher also interviewed the heads of the Woreda Education

offices and the CRC supervisors. They responded that material resources planning corresponding with the school's annual plan was very low. As the researcher made observation on the planning, there was mismatched planning exercise of material resources with school's annual plan in most sample secondary schools. Thus, it is possible to say that material planning corresponds to the school's annual plan is more unsatisfactory.

As depicted in Table 3, item three the majority of respondents 29(58%) responded for the purchasing of materials based on school annual plan was disagreed. The mean score for this planning activity is 2.44, which is found at low range. The data found from interviews also showed the same thing. Thus, from the obtained data one can conclude that material resources are not being purchased as they had been planned on time schedule to fit highly. This revealed that most of the respondents had almost the same opinion regarding to the mismatch between material resource that are planned and purchased items provided in terms of time.

On the same Table item 4 above the majority 21 (42%) of respondents agreed that budget allocation for the provision of the required materials. This item's typical score is 3.2, which is regarded as average. According to information obtained through interviews with respondents, all schools devote money each year for the distribution of supplies. But the critical problem in most schools is duplication of the previous budget plan. However, the budget allocated is not enough as compared as school's material needs.

4.2.1.2 Purchasing of Educational Material

This section covers the purchasing function, which is part of the management of instructional materials. This thesis' study of the relevant literature revealed that, beyond just making purchases, purchasing is one of the key roles of material resource management. Having this in mind, the respondents were asked to respond on the purchasing activities undertaken in the secondary schools. The responses of the respondents were illustrated here under.

Table 7: Quality of purchased Material Resources

No	Item	Scales										Total		Mean
		Ex		VG		AV		P		VP		N	%	
		F	%	F	%	F	%	F	%	F	%			
1	Quality of purchased materials	2	4	4	8	21	42	17	34	6	12	50	100	2.58
2	Relevance of purchased materials	2	4	4	8	18	36	20	40	6	12	50	100	2.52
3	Transparency of purchased system	1	2	2	4	19	38	21	42	7	14	50	100	2.38
4	Qualification of purchasing body	2	4	4	8	16	32	19	38	9	18	50	100	2.42
5	Fair and genuine utilization of purchasing procedures	2	4	3	6	21	42	17	34	7	14	50	100	2.52

Key: - Ex = Excellent VG = Very Good Av = Average P = Poor VP = Very Poor F = Frequency Scales: < 2.50 = Low, 2.50 –3.49 = Average, 3.5 – 5.00 = High

According to Table 7 of item 1, the mean score for the quality of the materials that were purchased is 2.58, which is categorized as reasonable. Only two (4%), four (8%), 21 (42%), 17 (34%), and six (12%), respectively, were assessed as excellent, very good, average, and poor.

With regard to relevance of purchased materials, data collected through questionnaires indicate that 26(52%) of respondents level these criteria as poor and very poor. The mean score is 2.52, which is found at the border line between average and poor.

In line with transparency of purchasing system, only three (6%) respondents rated the item as excellent and very good. The overall mean is 2.38 which is low. The result found from interviews and open-ended questions confirms this lack of transparency and accountability is the bottleneck of the purchase of educational materials.

In respect to qualification of purchasing body, almost 28(56%) rated it was poor and very poor. The mean score for this item was 2.42 which are low. One can say that there is a visible skill and

knowledge gap in this area. The researcher observed that school purchasers are selected from teachers randomly and there is a lack of qualification in purchasing.

With respect to fairness and genuine utilization of purchasing procedures, 24(48%) of the respondents rated it as poor and very poor, and 21(42%) rated as average. The data collected through interview indicated that there were times when the formal purchasing system is violated. The mean score for this item is 2.52 rate averages. From open-ended questions it is explained that transparency of purchasing system and qualification of purchasing body is the major problems observed.

4.2.1.3 Distribution of Material Resources

This thesis' analysis of the relevant literature revealed that material distribution is one of the key functions of material resource management that extends beyond just ensuring that goods reach users. Having this in mind, the respondents were asked to respond on the distribution activities undertaken in the secondary schools. The responses of the respondents were illustrated hereunder.

Table 8: Distribution of Material Resources

No.	Items	Scales										Total		Mean
		VH		H		A		L		VL		N	%	
		F	%	F	%	F	%	F	%	F	%			
1	Distribution of purchased materials as soon as users needed.	0	0	2	4	26	52	10	20	12	24	50	100	2.36
2	Collaborative performance of staff in material distribution	1	2	2	4	20	40	13	26	14	28	50	100	2.26
3	Distribution of materials based on user's requisition	2	4	8	16	26	52	7	14		14	50	100	2.82

Key: - VH= Very High, H= High, A= Average, L= Low and VL= Very Low Scales: < 2.50 = Low, 2.50 – 3.49 = Average, 3.5 – 5.00 = High

Distribution is a crucial component in managing material resources. Table 8 discusses how instructional resources are distributed in respect to this. As a result, item one discusses providing users with materials as soon as they need them. As such, the majority 26 (52%) of respondents responded average score. The mean score for this item is 2.36 rated low.

On the other hand, from interview the majority of respondents reported that adequate educational materials existed in the school but the problem is users did not get educational materials timely when they needed from the store. In this regard, MoE (2005/2006) stated, one of the major bottlenecks for the timely utilization of the resources is the lack of organizational and human capacity.

From this one can predict the existence of a problem in availing educational materials and equipment on time as users needed.

Item 2 of Table 4 above is about the collaborative performance of staff in material distribution. Accordingly, the majority, 27(54%) of the respondents were rated as low. The result shows that the mean score to be 2.26, which is at low rate.

To this point the data from the interview with Woreda Education office Heads and CRC Supervisors revealed that the collaborative performance of staff in material distribution was not satisfied. This clearly indicates that the low attention given by the concerned bodies for collaborative distribution. Hence, it is possible to say that the integration between the two bodies is not to the levels that enable us to utilize the scarce resource wisely. In that lack of inefficient collaboration among the distribution bodies and staff was the common felt problems.

In line with the distribution of materials based on user's requisition had a score mean of 2.82, which shows average. More than half 26(52%) of respondents also witnessed the distribution of materials based on user's requisition was average. But the result found from interview indicates that there is gap.

4.2.1.4 Maintenance of Educational Materials

This section focuses on the presentation and interpretation of the findings from surveys, interviews, and observations about the upkeep and proper handling of educational materials. The results found are discussed below.

- **Response of interviewees**

WEO: "The government annually distributes materials to schools, but effective maintenance is a problem that affects all schools. Maintenance activities were not planned even if there is budget allocated; schools were not given attention to maintaining materials".

CRC supervisors: Damaged material resources did not immediately maintain. No sufficient and effective maintenance professionals. "Materials are broken and piled in one room or another location within the school premises every day, but no attempts are made to maintain them. There is a lack attention of school administrative in all schools".

- **Response from the questionnaire was presented**

For the question, "How effective is your school at maintaining its educational resources?" 13 (26%) ranked it as average, 12 (24%) as very low, 23 (46%) as low, and 2 (%), 2 (%), and 2 (%) respectively said high and very high. The mean score is 2.12, which lies under the category of low. The researcher had also observed that educational materials, which need even simple repair, are thrown here and there in some schools. Of these educational materials all were bought with heavy governmental budget but are found damaged.

According to responses to the questionnaire's brief answer section, objects like text and reference books, plasma TVs, tables, and chairs were commonly destroyed. The participants were asked the reason for the frequent damage of these educational materials and why these were not quickly repaired.

The outcome showed that the most frequent causes of the damage and reasons for delaying repairs were less skilled/experienced professionals (34%), improper planning and handling (45%), and a lack of administrative follow-up (20%).

Regarding maintenance interviews result show that damaged material resources did not immediately maintained. No sufficient and effective maintenance professionals. This activity was the most problematic part, materials were distributed to schools every year but properly maintaining is the gap of all schools.

4.2.1.5 Storage of Educational Materials

This section discusses about how the results of questionnaires and interviews about how materials are handled in stores are presented and analyzed. The ratings and mean values are computed using the same analysis's trend.

Table 9: Views on Storage of Educational Materials

No.	Items	Scales										Total		Mean
		Excellent		V. Good		Average		Poor		V. Poor		N	%	
		F	%	F	%	F	%	F	%	F	%			
1	Properly recorded materials	3	6	8	16	21	42	12	24	8	16	50	100	2.84
2	Materials identification	2	4	6	12	24	48	11	22	7	14	50	100	2.7
3	Material codification	1	2	1	2	16	32	19	38	13	26	50	100	2.16
4	Immediate supply of materials	1	2	3	6	19	38	13	26	14	28	50	100	2.28
5	Proper storage materials system	1	2	3	6	17	34	15	30	14	28	50	100	2.24

F= Frequency

According to the data shown above, the mean score for properly recorded materials is 2.84, which is considered average. The mean value for material identification is 2.7, also considered to be average, while the mean scores for material codification, immediate supply from the store, and proper storage of educational materials, respectively, are 2.16, 2.28, and 2.24, both of which are low.

The respondents were also asked how the storekeeper cross-checked the return of materials. Of those, 70% said there was no clearly defined system to manage material return, 20% said they used a master list, and 10% said they used various ways.

According to the information obtained through interviews, several of the sampled schools tried to document their educational resources, but they were suffering from a lack of adequate material identification and codification. As a result, they had difficulty providing or accessing the existing educational resources. It is found from the results via interview and observation, the storekeepers make a mess of educational materials to search for one and the other is no clear set of material return technique.

4.2.1.6 Utilization of Material Resources

The proper utilization of material resources is very important because of its role in the achievement of educational objectives and goals. The achievement of educational objectives is influenced by the existence or absence of the proper usage of material resources. On the basis of this, respondents were prompted to offer comments on the actions taken in relation to the use of material resources. The responses obtained are presented here under.

Table 10: Respondents view on Material Resource Utilization

No.	Items	Scales										Total		Mean
		VH		H		A		L		V. L		N	%	
		F	%	F	%	F	%	F	%	F	%			
1	The accountability for misused material	2	4	7	14	26	52	7	14	8	16	50	100	1.76
2	Follow up and check made by responsible bodies for utilization	1	2	2	4	19	38	15	30	13	26	50	100	2.26
3	The protection of materials from any wastages	0	0	4	8	15	30	13	26	22	44	50	100	2.18

Key: - VH= Very High, H= High, A= Average, L= Low and VL= Very Low Scales: < 2.50 = Low, 2.50 – 3.49 = Average, 3.5 – 5.00 = High

As it is indicated in Table 10, item 1, the respondents were asked to indicate the accountability of users for misuse of material resources in their school.

The majority 26 (52%) of respondents provided average responses in this regard. The mean score for this item was 2.76, likewise within the range of average. According to the information acquired from interviews, taking actions is done with less accountability and dedication.

From this one can conclude that the accountability of users for the misuse of material resources in sampled school was satisfactory.

In item 2 of the same Table, respondents were requested to rate the follow up and check made by responsible bodies for utilization of material resources. The majority 19 (38%) respondents agreed that there was little follow-up and minimal material checking in this regard. This item's average score is 2.26, which is regarded as low.

Therefore, it seems that the follow up and checks made by responsible bodies for utilization of material resources was not fully being carried out which in turn affects the utilization of material effectively.

Item 3 of Table depicts the protection of materials from any wastage. As such almost the majority 22(44%) of respondents replied very low. To support the aforementioned reality, the interview questions were directed at the heads of the Woreda Education office and the supervisors of the CRC. If not, why not? "Are school societies looking after the educational materials at the school level? The vast majority of respondents claimed that there is no maintenance whatsoever, and they gave the following reasons: lack of commitment and knowledge of one's own responsibility for maintaining school property as one's own. Moreover, the schools had not any strategies or mechanism to safe materials from any wastage.

The response indicates that, among the majority of school societies with taking care for school property was less attention.

From the above data, one can conclude that material protection from any wastage was at low level and it needs more improvement on the practices of the above activities in secondary schools. Implementations of material recourses utilization were poor participation involving stake holders.

4.2.1.7 Inventory Control of Material Resources

In the review literature parts, it was stated that organizations should apply inventory to assure the effective and efficient use of material resources. An inventory system is the set of policies and controls that monitor levels of inventory and determine what levels should be maintained, when stock should be replenished, and how large orders should be (Jacobs, 2008). Based on the above concepts questions were presented for respondents and discussed as follows:

Table 11: Respondents view on Inventory control

No.	Item	Scales										Total		Mean
		VH		H		A		L		VL		N	%	
		F	%	F	%	F	%	F	%	F	%			
1	Usage of inventory control system	2	4	2	4	25	50	9	18	12	24	50	100	2.46
2	Frequency of inventory conducted	3	6	3	6	13	26	21	42	10	20	50	100	2.6
3	Report after inventory	1	2	2	4	25	50	10	20	12	24	50	100	2.4
4	Process of updating inventory records	1	2	1	2	6	12	31	62	11	22	50	100	2

Key: - VH= Very High, H= High, A= Average, L= Low and VL= Very Low Scales: < 2.50 = Low, 2.50 – 3.49 = Average, 3.5 – 5.00 = High

The usage of inventory control items, frequency of conduct, report after inventory, and updating method are all displayed in the above table. The result show that the mean score to be 2.46, 2.36, 2.4, and 2.0 respectively, which are at low rate. These indicate that there is a gap in inventory system. Result from interview also indicates that all schools did this activity but the problem was that it is not well planned and the inventory results were not properly used on planning of materials.

4.2.1.8 Result on Obsolescence and Surplus materials

Response from interview:

WEO Heads: “In all schools there are many materials that are not sold or donated. Materials which were not used in secondary schools were compiled at one class idle”.

CRC supervisors: In schools there are materials like machines and supplementary books which are not used in secondary schools. They were all out dated. Textbooks were surplus in some school while there were shortages in other schools. Transferring these textbook to the other school is also other cost.

Data obtained via questionnaire indicated that the main reasons for obsolescence and surplus of educational materials to be: Planning issues (28%) aging (32%), curriculum changes (20%), purchasing errors (10%), and quality issues (10%), in that order. Additionally, it was urged that schools take action against excess and outdated educational materials. As a result, 38% of the respondents indicated that collecting at one place and storing them somewhere. Similarly, 36%, 14% and 12% respectively chose dumping/burning, donating to others and selling. The result indicated that there is a high amount of resource wastage in these schools.

Interview data demonstrate that there were several idle materials in all schools. The researcher also saw many materials that were stored improperly in the entire sampled school compound.

4.2.2 Role of Stakeholder’s in Material Resource Management

Table 12: Stake Holder’s Participation in Material Resources Management

No.	Item	Scales										Total		Mean
		VH		H		A		L		VL		N	%	
		F	%	F	%	F	%	F	%	F	%			
1	Planning	1	2	2	4	26	52	10	20	11	22	50	100	2.44
2	Purchasing	2	4	3	6	20	40	13	26	12	24	50	100	2.4
3	Distribution	0	0	3	6	26	52	8	16	13	26	50	100	2.38
4	Utilization	12	24	20	40	7	14	6	12	5	10	50	100	3.56
5	Controlling	0	0	1	2	19	38	16	32	14	28	50	100	2.14

Key: - VH= Very High, H= High, A= Average, L= Low and VL= Very Low Scales: < 2.50 = Low, 2.50 – 3.49 = Average, 3.5 – 5.00 = High

As shown in Table 12, the majority 26 respondents (52%) believe that stakeholder participation in the planning of instructional materials is average. The mean score for all respondents is 2.44 as well. Therefore, this average score suggested that there was little stakeholder involvement in the planning of educational materials. Regarding this idea, literature revealed that schools need the participation of all stakeholders in the school plan (strategic and annual plan), but most of the time school plan is prepared by school principals. But stakeholders (such as members PTSA) have some participation in planning phase.

The results in Table 12 showed that most respondents 25(50%) regarded the involvement of stakeholders in the purchase of instructional resources as being low. It received a mean rating of 2.4, which is considered low. The result from the interview also shows that the participation of stakeholders in educational materials purchasing is low.

Many respondents (26, or 52%) described the involvement of stakeholders in the provision of instructional resources as being ordinary. Even though the rate is low, the mean score is 2.38. The information obtained through interviews and check lists also showed that although the timing, ratio, and method of delivering these materials are not specified, participation was higher than it was for other activities.

Regarding the participation of stake holders on utilization of educational materials, the majority 20(40%) of respondents were rate at high. The mean score is 3.56, which lies under the category of high. Furthermore, there were also items which ask at what level the schools use the participation of stake holders.

The results of the interviews showed that all stakeholders' use of the educational materials was slightly better. As a result, they participate in conversations.

As indicated in item 5 of table 12, the respondents were requested to rate the participation of stakeholders on controlling educational materials. Accordingly, the majority, 30(60%) of respondents were rated as low.

4.2.3 Respondents' view on Availability and Use of Guidelines for Educational Materials Management

Response from the interview:

CRC supervisors: There are guidelines in all schools but, the school administrators are not giving attention. They were not made access able to the school community who are assumed to help principals and others to implement them on their daily activities regarding educational materials.**WEO:** There are guidelines in the schools; the problem is that when the school principals leave the school they are not transferred to the new one. There are different guidelines in the schools but, training or giving awareness to the school community was the problem.

Table 13: Availability and Use of Policies and Guidelines Regarding to Educational Materials Management and Utilization

No.	Item	Scales										Total		Mean
		VH		H		A		L		VL		N	%	
		F	%	F	%	F	%	F	%	F	%			
1	There are polices and guidelines regarding materials management in school	4	8	7	14	16	32	17	34	6	12	50	100	2.72
2	The accessibility of policies and guidelines	2	4	4	8	15	30	18	36	11	22	50	100	2.36
3	Based on the government guidelines the school made their own guide line	2	4	7	14	13	26	18	36	10	20	50	100	2.46
4	There is high commitment of concerned bodies to make awareness/training on polices and guidelines	1	2	4	8	12	24	21	42	12	24	50	100	2.02

Key: - VH= Very High, H= High, A= Average, L= Low and VL= Very Low Scales: < 2.50 = Low, 2.50 – 3.49 = Average, 3.5 – 5.00 = High

As displayed in the table above, the mean values for the presence of formally established guidelines and policies in the school, accessibilities of these policies and guidelines, based on the government guidelines they made their own guidelines, and commitment of concerned bodies to create awareness are, respectively 2.72, 2.36; 2.46; and 2.02.

The above data indicated that there is guidelines in the schools as the mean value is at average score 2.72. Lacks accessibility of guidelines, the preparation of their own guidelines and creating awareness/training to the community were the gaps observed.

The findings show that multiple government policies and guidelines were present in the schools, but no attempt was made to raise staff understanding or arrange training that would be useful. In addition, when school principals change jobs or leave their positions, they are not automatically transferred to the new institution. Regarding these, most schools didn't create their own guidelines for these activities.

4.2.4 Majors Problems and their Action to be Taken in Material Resource Management

There are many factors which negatively affect the management of materials in secondary schools obviously. In this regard, the principal, vice principals, department heads, school support staffs were asked to give their opinion based on the given alternatives.

Response from the interview

CRC supervisors:Damaged material resources did not immediately be maintained. No sufficient and effective maintenance professionals. For instance, text and reference books, plasma TVs, tables, and chairs were not functional because of the lack of maintenance permanently. There is no separate room for maintenance activities. Because of this, damaged resources were stored everywhere. There is no formal mechanism for organizing supervision or material control in the schools. Even materials distributed from the education bureau did not have controlling and evaluation mechanism. Less coordination between school communities left material management activities to be only the responsibility of principals and store-keepers.

WEO Heads:Damaged material resources did not immediately maintain. Maintenance activities of material resources are not efficient.Schools have a need to new education materials year to year rather than managing what is on hand. There is no clear identification, codification systemin

schools store management. Technology support (computerized system) of marital management system was not practiced. Data gathered from schools were not reliable because such materials like textbooks are scarce in one school and are surplus in other school.

- **Response for action to be taken:**

CRC supervisors: School principals should create awareness to all school community and stakeholders. Every individual in the schools should develop a sense of responsibility and belongingness of materials in the schools. Each material management function should be planed, and the frequency of supervision inside and outside should be considered.

WEO: “Uniform educational material management and utilization system should be implemented in all schools”.

Data gathered from open- ended question were summarized as follows: There was damaged material resources did not immediately maintain. No sufficient and effective maintenance professionals. The disposal of obsolete material was found to be insignificant, which has an invisible effect on material resource utilization. Alack of close supervision and proper planning from concerned bodies cause shortage of important materials, in the schools materials are stored for a long period of time in store and some of them became out of use.

There is no uniformity of material management and utilization system among the schools community. Less effort is being put out by school principals to educate and train the school's community and stakeholders on material management.

- **Data gathered from closed- ended questions for the item:**

To what extent do school computers effectively used by school community (teachers, students and administrative staffs), no one responded very high, only 2 (4%) responded high; 20 (40%) rated as average; 18 (36%) rated it as low, and 10 (20%) rated as very low. The mean score is 2.2, which lies under the category of low.

All schools did not use plasma televisions. The reason is lack of qualified/experienced technicians and absence of electric power.

For an item that asks whether there is a responsibility of assigned body to monitor the educational materials management: out of the 50 respondents, (53%), and (28%) responded

disagree, and undecided. This indicates that there are no clearly assigned professionals to effectively run the educational materials in these schools.

Mechanism used by school administrators and education officers were found to be supervision and inspection. Furthermore, 54% of respondents believed that principals are more committed in controlling and monitoring educational materials, 30% thought that storekeepers are more committed and responsible in monitoring educational materials. This indicates that there is a gap in considering responsibility.

Regarding the major problems the data gathered from the interview and open-ended questions indicate that Lack of organized supervision and controlling mechanisms were the first problems. The second problem is the lack of uniform material management system with in schools.

CHAPTER FIVE

5. SUMMARY CONCLUSION AND RECOMMENDATIONS

This section of the study focuses on the summary of the key findings, the conclusions reached, and the recommendations forwarded based on the conclusions made.

5.1. Summary

The purpose of the study was to investigate how educational resources were managed and used in five secondary schools within the DeraWoredaOromia regional state. All the five secondary schools were sampled for this study. All school principals, vice principals, department head teachers, purchasers, store-keepers, school supervisors, and Woreda Education Office heads were taken as informants in the study. The study was conducted using questionnaires, interviews and observation as data gathering tools and descriptive survey research design was employed to conduct the study.

In that light, the following basic questions were answered during the study.

1. How are Educational Material Resources managed and utilized to achieve educational objectives in secondary schools of Oromia regional state DeraWoreda?
2. What main roles do stakeholders play in the management and utilization process of Educational Materials?
3. What are the major problems related to educational material resources management and utilization in secondary schools of DeraWoreda?

The analysis and interpretation of the data, come up with the following major findings are:

5.1.1 Educational Material Resource management function issues

1. The study's findings demonstrated that the function of managing material resources in the sampled schools could be rated at 3.24, 2.22, 2.46, and 3.2, respectively, for planning activities, planning educational materials, planning materials to correspond to the school's annual plan, making purchases based on the annual time schedule, and budget allocation for the provision of the necessary materials. Findings revealed that regarding planning of educational materials and budget allocation for the provision of the required materials, the highest number of the groups of respondents confirmed as average. With respect to material planning correspond school's annual plan and purchases are made

based on the annual plan time schedule, the findings indicate that the scores are categorized under low rate. Interviews results show that all schools prepare plan but their plans do not show how much resources needed to schools. Because of this there is shortage of materials in some schools while there found surplus materials in other schools. As planning activity is a sensitive issue still there is a gap in planning of educational materials.

2. The result found via interviews and observation on the purchasing process, there are weaknesses in the areas of purchasing activities. The mean values for the transparency of acquired systems and the qualification of purchasing bodies are, respectively, 2.38 and 2.42, which is a low rate. Therefore, one can conclude that there is gap in transparency of purchasing materials and qualification of purchasing bodies. Relevance of purchased materials rated 2.52 which is a little better than the low score. Quality of purchased materials and fair and genuine utilization of purchasing procedures were 2.58 and 2.52 respectively which indicate average score. Damaged material resources did not immediately maintain. No sufficient and effective maintenance professionals.
3. Concerning of distribution of educational materials to schools, the findings revealed that distribution of materials based on user's requisition the largest number of the groups of respondents confirmed as average the mean value being 2.82. The distribution of purchased resources as soon as consumers require them and staff collaboration during the distribution of materials have mean values of 2.36 and 2.26, respectively, both of which are at low score.
4. The method for storing and providing educational materials is inadequate. It is learnt that material codification, immediate supply of materials and proper storage materials system were low; 2.16, 2.28 and 2.24 respectively. As their recordings are traditional, no one can access a material with less effort and lacks proper codification. However, the mean values for accurately documented materials and materials identification are 2.84 and 2.7, respectively, indicating an average score.
5. With regard to material resources utilization the majority of the respondents reported as the accountability for misused materials mean value is 2.76 it indicated that an average score.

With regard to follow up and check made by responsible bodies for utilization and the protection of materials from any wastage the highest number of the groups of respondents mean value is 2.26 and 2.18 respectively which are low score.

6. The result on inventory control system was found to be unsatisfactory. The mean score on usage of inventory control system, frequency of conducted inventory, report after inventory and process of updating inventory were 2.46, 2.36, 2.4 and 2 respectively, which is low.

In relation to this, it has been noted that inventory control is conducted once a year in the majority of sample schools for document analysis. This result may be faces over ordering of purchasing, over stocking or unwanted educational materials existed in the stores and procurement of needed materials would be forgotten. Based on the result of analysis one can conclude that there is a gap in inventory control system.

7. According to respondents, the main causes of excess or obsolete material management include planning issues (28%), becoming older (32%), curricular changes (20%), purchase errors (10%), and quality issues (10%). The data obtained through interviews showed that many things that are helpful for vocational schools are wrongly stacked in schools. These were also realized by the researcher during his observation. Common measures taken by schools regarding obsolescent materials are dumping (burning), and storing the materials at one place.

5.1.2.Roles of stakeholder's in Material Resource Management

Participation of stakeholders in planning, purchasing, distribution, utilization and controlling of educational materials in the schools were found their mean score to be 2.44, 2.4, 2.38, 3.56 and 2.14 respectively. At planning, purchasing distribution and controlling activities the mean value were low. But utilization activities score 3.56 which lie on average. Furthermore, results from qualitative data revealed thatstakeholders participation was at low level. Most of the stakeholders were found to participate in material support and by giving comment on planned manual. There are no formal systems for controlling and participating.

5.1.3 Availability of policies and guidelines in the school issue

Though it is found out that there are policies and guidelines in these sampled schools, efforts made to make them accessible to the stakeholders/school community/ and creating awareness and training on the issue is very poor.

5.1.4 Results on the major problems:

There were damaged material resources did not immediately maintain. No sufficient and effective maintenance professionals. The disposal of obsolete material was found to be insignificant, which has an invisible effect on material resource utilization. There is no uniformity of material management and utilization system among the schools. The storage management system is in poor condition in all schools. Lack of continuous supervision from concerned bodies lead that materials management functions not being properly practiced.

5.2. Conclusion

Based on the objectives and findings of the study the following conclusions have been made: The implementation of management and utilization of educational material resource which are selected five secondary schools of Deraworedawere found to be poor in terms of involving stakeholders (PTSA, Woreda Education Office, Teachersetc) wise and efficient use of material management functions (planning, purchasing, maintenanc, distribution, storage, utilization and inventory control). There were schools without proper store-room and lack of employed workers; so that materials were not properly identified, coded and recorded. This implies that no modern technology support system. This could also expose the materials to wastage and damage.

There are guidelines and policies regarding educational material management and utilization in schools. But there was huge gap in the availability and accessibility of these guidelines to the stakeholders and school community. Follow up and check made by school principals and woreda education office educational material resource provision and supervision experts for utilization and the protection of materials from any wastage was poorly exercised. Lack of timely distribution of purchased materials as soon as user's needed practices was also a serious problem in these sampled schools. The process of updating inventory in these schools was poorly implemented.

Major problems that are found challenge for management and utilization of educational material resource system were poor maintenance activities, inadequate storage, lack of uniformity of material management and utilization, low awareness and training about material management functions and their integrated relation between each activity. The disposal of obsolete material was found to be insignificant, which has an invisible effect on material resource utilization. Moreover, lack of continuous supervision and controlling system from outside and inside the schools made accountability and responsibility ineffective.

5.3. Recommendations

In education institutions material resource management is a crucial issue to accomplish the objectives of the institutions, and it is a corner stone to achieve the educational objective. Based on the findings and conclusions drawn, the following recommendations are forwarded:

1. Material resource management functions such as planning, purchasing, maintenance, distribution, storage; utilization and inventory control were not well done. Knowingly identifying the specification of material resources could be purchased based on the specification. It is better to lead the procurement activities through premarket investigation to know about suppliers. Post purchase checkup could be used to evaluate and take appropriate actions.
2. Dera Woreda Educational Office is recommended to set a continuous supervision and controlling system of educational material resources management in secondary schools.
3. School management should work closely with the school community and stakeholders. It is also vital to capacitate stakeholders through training and accessible guidelines.
4. The result of the study revealed that there was poor maintenance activity. Because of this, different material resources were not functional. The concerned body could have to give attention and allocate adequate budget for maintenance and have to hire sufficient and effective professionals. It is better to organize a separate maintenance center.
5. The woreda and the school should collaborate on the administration and exploitation of material resources in order to foster a sense of community among the staff, students, teachers, and communities as well as a sense of belonging and ownership to the educational properties.

6. The school is advised to work with stakeholders (PTSA, Woreda Education Officers etc) to achieve optimal productivity and efficiency in management and utilization of educational material resources of secondary schools.
7. Principals ought to make guidelines and policies accessible and available enough to empower the entire staff with the knowledge and skills on the issue.
8. Inventories of educational materials resources have not been taken regularly in secondary schools. This causes a problem of properly controlling educational material resources. Therefore, it is recommended that inventories of educational material resources be taken by the school twice a year. This could be held by assigning a committee. This helps the school to clearly identify material resources that are properly functioning or that are damaged within a year. In turn, this helps to pay attention for plan new educational materials to be purchased.
9. It is recommended to Woreda Educational office and the school to set experience sharing schedule for school leaders, teachers and school support staff to learn a good lesson from best practices in material resource management functions in particular.

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Appendix I

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES

DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

Questionnaire to be filled by Department Head Teachers and Administrators and SupportStaff

The main purpose of this questionnaire is to collect valid and reliable data on “The Management and Utilization of Material Resource in Secondary Schools of DeraWoreda.” Thus, your genuine responses will help the researcher to provide reliable and valuable suggestions and recommendations. Your response will be used for academic purpose. I will like to express my appreciation in advance for your time and consideration.

Thank you!

General Directions:

1. You do not need to write your name.
2. Choose the best alternative and write on the space provided
3. Give short and precise responses to the open ended questions.
4. Please provide the most appropriate responses you can to each of the closed-ended questions.

Section One: Back ground information

The school's name _____

1. Gender of respondent: A. Male B. Female
2. Educational Level: A. Diploma B. BA/degree C. M.A/Masters
3. Years of service: A.1- 5 years B. 6-10 years C. 11-15 years
D. 16-20 years E. 21-25 years F. More than 25 years

Section two: Questions Related to Material Resource Management Functions

2.1. To what extent do you rank the following statements regards to materials resources planning? (The numbers indicate Please 5 = Strongly Agree; 4 = Agree; 3 = Undecided; 2 =

No.	Items	Scales				
		5	4	3	2	1
1	Planning of educational materials					
2	Purchases are made based on the annual plan time schedule					
3	Purchases are made based on annual plan					
4	Budget allocation for the provision of the required materials					

2.2. Purchasing of Educational Materials

1. In your view, how frequently the school purchases educational materials on time?

A. Always B. Sometimes C. not at all

D. If any other _____

2. If your answer for item 1 is “not at all”, what do you think is the reason? (You can take more than one).

- A. Shortage of budget
- B. Absence of quality materials in the market
- C. Lack of commitment on the part of concerned bodies
- D. Delay of budget release on the part of finance office
- E. Absence of purchasing committee

3. To what extent are the following purchasing issues met in your school?

(The number indicates: 5= Excellent 4= Very good 3= Average 2= Poor 1= Very poor)

No.	Items	Scales				
		5	4	3	2	1
1	Quality of purchased materials					
2	Relevance of purchased materials for the teaching/learning process					
3	Transparency of purchasing system					
4	Qualification of purchasing body					
5	Fair and genuine utilization of purchasing procedures					

4. What major problems do you observe in purchasing material, please specify _____

2.3 Allocation and Distribution of Educational Materials

Please rate the extent of allocation and distribution of educational materials.

(The number indicates: 5= Excellent 4= Very good 3= Average 2= Poor 1= Very Poor)

No.	Items	Scales				
		5	4	3	2	1
1	Distribution of purchased materials as soon as users needed.					
2	Collaborative performance of staff in material distribution					
3	Distribution of materials based on user's requisition.					

2. What major problems do you observe in distribution of resources? Please, specify

2.4 Maintenance of Educational Materials

1. How effective is your school regarding the maintenance of educational materials?

A. Very high B. High C. Average D. Low E. Very low

2. If your answer is “low” or “very low” for the above question, what do you think the reason are (you Can choose one or more options)

A. Lack of administrative follow up

B. less experienced or less qualified technicians

C. Lack of proper planning

D. If others, please specify _____

3. Which materials are frequently damaged and need maintenance in your school. (You can choose one or more options)

A. Tables and chairs B. Text books and reference books

C. Plasma D. Computers

E. Electric system F. Laboratory materials

G. Teaching aids

H. Walls and window

I. If any other, please specify _____

2.5 Storage of Educational Materials

1. How effective is your school regarding material handling in store?

(The numbers indicate: 5= Excellent 4= Very good 3= Average 2= Poor 1= Very Poor)

No.	Items	Scales				
		5	4	3	2	1
1	Properly recorded materials					
2	Material identification					
3	Material codification					
4	Immediate supply of materials from the store					
5	Proper storage facilities					

2. What major problems do you observe in distribution of resources? Please, specify

2.6. Utilization of Educational Materials

1. Please rate the extent of utilization of material resources.

(The number dedicate 5= very high 4= high 3= Average 2= Low 1= Very low)

No.	Items regarding material handling in store	Scales				
		5	4	3	2	1
1	The accountability for misused material					
2	Follow up and check made by responsible bodies for utilization					
3	The protection of materials from any wastages					

2.7. Inventory Control of Educational Materials

1. How do you rate the following inventory control activities in your school?

(The number dedicate 5= very high 4= high 3= Average 2= Low 1= Very low)

No.	Items	Scales				
		5	4	3	2	1
1	Usage of inventory control system					
2	Frequency of inventory conducted					
3	Report after inventory					
4	Process of updating inventory records					

2.8 Obsolete and Surplus Materials

1. What do you think is the reason for obsolete and surplus materials in your school? (You can choose one or more than one).

A. planning problem B. getting old

C. Curriculum changed D. faulty in purchasing

E. quality problem F. other _____

2. What measure does the school take regarding to surplus or obsolete materials? (You can choose one or more options)

A. Donating to other schools B. Dumping or burning

C. Selling D. Collecting such materials at one place

Section Three: Questions Related to the Role of Stakeholders in Material Management

3.1. To what extent do you participate in the process of planning, purchasing, distribution, utilization and inventory controlling of material resources are performed?

Key: 5= Very high 4= High 3= Average 2= Low 1= Very low

No.	Items	Scales				
		5	4	3	2	1
1	Planning					
2	Purchasing					
3	Distribution					
4	Utilization					
5	Controlling					

3.2. At what level the schools use the participation of stake holders /supervisors, department, heads, PSTA and School support staff? (You can take more than one)

- A. At committee level B. by discussion
- C. By asking technical support D. If others _____

Section Four: Questions Related to Availability and Use of Guidelines for educational Materials Management

To what extent the following guidelines issues are met in your school?

Key: 5=strongly agree 4=agree 3=undecided 2=disagree 1= strongly disagree

No.	Items	Scale				
		5	4	3	2	1
1	There are policies and guide lines regarding material resource management in the school					
2	The policies and guidelines regarding educational material resource management are easily accessible for users					
3	Based on the government guidelines the school made their own guidelines					
4	There is high commitment concerned bodies to make awareness to stake holders					

Section Five: Questions Related to Major Problems in Material Management and Action to be taken

1. What are the major problems in using computers in the school?

A. Shortage of computers B. absence of electric

C. absence of trained person D. absence of computer class

E. If others, specify _____

2. To what extent do school Plasmas are used?

A. always B. sometimes C. not at all

If you say some times or not at all, what is the problem? _____

3. There is an assigned body to control the availability and utilization of educational materials in the school.

- A. Strongly agree B. Agree C. Undecided D. Disagree E. strongly disagree

4. If your response is “strongly agree” or “agree”, what mechanisms are used to monitor and control these materials?

- A. Supervision B. Inspection through checklist C. Both supervision and inspection

D. If other mechanisms, specify _____

5. In your school, which one of the following people are more committed or responsible in controlling and monitoring educational materials (you can take more than one opinion).

- A. Principals B. Store keepers' C. Department heads D. Sub city supervisors

E. If others, specify _____

6. What are the basic problems that are observed in your school regarding educational materials resources management and utilization?

7. What do you suggest to solve the overall problems in the management and utilization of educational materials resources in your school? Please specify _____

Appendix II
ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES
DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

Interviews to be contacted with Woreda Education Office Heads and CRC Supervisors

Dear respondent, the purpose of this interview is to collect relevant data on the study entitled “The Management and Utilization of Material Resource in Secondary Schools of DeraWoreda” your response is vital for the success of the study. You are kindly requested to response the interview confidentially. Be sure that your response will not be used for any purpose rather than academic purpose.

Thank you in advance for your genuine and kindly cooperation!

1. is there a workshop regarding educational resource management and utilization? How many times a year?
2. Are human and other resources available in schools sufficient?
 - Does your organization have store- room for properties?
 - What is the condition of the ware house?
3. Are the materials and equipment purchased in required standard?
 - How about distributions?
4. What are the major problems embodied in resource distribution and allocation? Do Woreda`s distribute materials and equipment equally for all secondary schools?
 - Are there idle resources?
 - What procedures do you use to withdraw items from the store-room?

5. Are resources in schools effectively used? If there is wastage what is the reason?
6. What is the practice of maintenance for the damaged properties in order to bring them back to functioning?
7. To what extent do school computers effectively used by the following stake holders?
 - Principals
 - Students
 - Teachers
 - Other administrative staffs
 - What are the major problems in using computers in the schools?
8. To what extent do school Plasmas are used?
 - What are the major problems in using Plasma?
9. What are the major problems that are observed in your school, regarding educational materials resources management and utilization?
10. What do you suggest to solve the overall problems in the management and utilization of educational materials resources in your school?

Appendix III

Observation Checklists

1. How often the following Educational materials are properly managed and utilized in the school?

Key: 5= Excellent 4= Very good 3= Average 2= Poor 1= Very Poor

No.	Educational materials	Rating Scales				
		5	4	3	2	1
1	Plasma					
2	Computers					
3	Library					
4	Text books					
5	Store Rooms					

2. How do the following managing and utilizing activities of material resource is applied in the school? *(The number indicates: 5= Excellent 4= Very good 3= Average 2= Poor 1= Very Poor)*

No.	Activities	Rating scale				
		5	4	3	2	1
1	Planning activities					
2	Purchasing of Educational Materials					

3	Maintenance of Educational Materials					
4	Proper storage facilities					
5	controlling of educational materials					

3. Are schools well equipped with human and other resources?

- Does the organization have store- room for properties?
- What is the condition of the ware house?
- Does the warehouse have enough space for storing the properties?
- Are the materials coded and given identification number?

4. Storage of Educational Materials Properly recorded materials Material identification Material codification, immediate supply of materials from the store

- How about distributions?

No	Activities	Rating Scales				
		5	4	3	2	1
1	Planning activities					
2	Purchasing of Educational Materials					
3	Maintenance of Educational Materials					
4	Proper storage facilities					
5	controlling of educational materials					