

**EDUCATIONAL MATERIAL RESOURCE MANAGEMENT
IN SECONDARY SCHOOLS OF EASTERN HARARGHE ZONE
OROMIA REGIONAL STATE**

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DEDICATION

I dedicate this thesis manuscript to my wife Zebenay Birhanu , my beloved children Kaieab Seifu and Nahom Seifu for their dedicated partnership in the success of my life.

STATEMENT OF THE AUTHOR

First ,i declare that this thesis is my solely work and that all sources of materials used for this thesis have been duly acknowledged. This thesis has been submitted in partial fulfillment for the requirement of ma degree at Haramaya University and is expected to be reserved at the university library in order to be used under the rules of the library . Brief quotations from this thesis are allowable without special permission provided that accurate acknowledgement of sources are made .requests for permission for extended quotation from or reproduction of this manuscript in whole or in part may be granted by the head of the major department or the dean of the school of graduate studies when in his or her judgment the proposed use of the material is in the interest of scholarship . In all other instances, however, permission must be obtained from the author.

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BIOGRAPHICAL SKETCH

The author was born on april 2,1978 in tulo woreda, Western Hararghe Zone of Oromia regional state. He attended his primary and secondary school education at midegdu primary school and hirna comprehensive school . He then joined Jjemma Teacher's College and received certificate in diploma in 1995, in the same year he joined Haramaya University though summer in-service program and graduated in history in 1999. The author had eight years of teaching experience, and worked as school principal for six years. Finally, he joined the school of graduate studies at Haramaya university in 2015 .the author is married and is a father of two children.

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TABLE OF CONTENTSS

DEDICATION	i
STATEMENT OF THE AUTHOR	ii
BIOGRAPHICAL SKETCH	iii
ACKNOWLEDGEMENTS	vi
ACRONYMS AND ABBREVIATIONS	viii
LIST OF Tables	ix
ABSTRACT	x
1. INTRODUCTOIN	1
1.1 Background of the Study	1
1.2. Statement of the Problem	3
1.3. Research Questions	4
1.4.Objectives of the Study	4
1.4.1. General Objectives	4
1.4.2 Specific Objectives	4
1.5. Significance of the Study	5
1.6. Delimitation of the Study	5
1.7.Limitations Definition of key Terms	6
2. REVIEW OF RELATED LITERATURE	7
2.1. Concepts of Educational Resource	7
2.2. Classification of Educational Material	7
2.3. Educational Material Management	9
2.4. Material Resources Planning	9
2.5. Purchasing of Material Resources	10
2.5.1. Purchasing Procedures	12
2.5.2. Purchasing Policy	13
2.6. Proper Utilization of Material Resources	13
2.6.1. Storage and handling of material resources	14
2.6.2. Inventory control	15
2.7. Maintenance of Material Resources	16
2.8. Stakeholders in the Material Resource Management	17

2.9. Materials Need Assessment	18
2.10. Guidelines for Material Management	18
2.11. Disposing Obsolete, surplus and scrap Materials	19
2.12. Materials Management in Ethiopian Context	20
3. RESEARCH DESIGN AND METHODOLOGY	21
3.1. Research Design	21
3.2 Description of the study Area	21
3.3 Source of Data	21
3.3.1. Primary Sources	21
3.3.2. Secondary Sources	22
3.4. Population, Sample Size and Sampling Techniques	22
3.4.1. Target Population	22
3.4.2 Sampling Techniques	22
3.5. Data Collection Instruments	23
3.5.1. Questionnaire	23
3.5.2. Document review	23
3.5.3. Interview Guide	24
3.6. Procedures of Data Collection	24
3.7. Method of Data Analysis	24
3.8. Ethical Consideration	25
4. Results and Discussions	26
4.1. Respondents Characteristics	26
4.2. Materials Management Functions and its practice	28
4.2.1. The means Used in Assessing Needs for Material Resource	28
4.2.2. Planning of material Resources	33
4.2.3. Purchasing and Presences of Guidance	38
4.2.4. Utilization and Guideline of Material Resources	42
4.2.5 . Storage and Handling of Materials	46
4.2.6 .Maintenance of Material Resources	49
4.2.7. Inventory of Material Resources	53
4.2.8. Disposing Unused Materials in the School	55
4.3. participation of Teachers and Non-teaching staff	60

5. SUMMARY ,CONCLUSION AND RECOMMENDATION	64
5.1. Summary	64
5.2 . Conclusion	66
5.3 . Recommendations	67
6.REFERENCES	69
7 .APPENDICES	73

ABBREVIATION AND ACRONYMS

FDRE	Federal Democratic Republic of Ethiopia
IQPEP	Improving Quality of Primary Education Program
NGO	Non- Governmental Organization
PTA	Parent Teacher Association
TTC	Teacher's Training College
UNESCO	United Nationals Educational, Scientific Cultural Organization
WEO	Woreda Education Office
ZEO	Zonal Educational office

LIST OF TABLES

Table 1. Population, Sample Size And Sampling Techniques	22
Table 2, Sex, Age, Educational Level And Service Year Distribution Of Respondents	26
Table 3.1 Items to Needs assessment of Material Resource	29
Table 3.2. Items Related respondents response on Need Assessment of	31
Table 4.1 Planning of material resources	34
Table4.2 Respondents response on Planning of material resources	35
Table 5.1 Items related to Purchasing of Material Resources	38
Table 5.2 Items Related to Purchasing of Material Resources	40
Table 6.1 Issues related Utilization of Material Resources	43
Table 6.2 Issues Related Utilization of Material Resources	43
Table 7.1 Items related to Storage of Material Resources	46
Table 7.1 Items Related to Storage of Material Resources	48
Table 8.1 Items related to maintenance of Material Resources	49
Table 8.2 Items Related to maintenace of Material Resources	51
Table 9.1 Items related to inventory control of Material Resources	54
Table10.1 Issues related to disposal of Material Resources	56
Table 10.2 Issues related to Disposal of Material Resources	57
Table 10.3 Issues Related to Disposal of Material Resources	58
Table 11. Items related to participation of teachers and Non-teaching staff in Material Resourcesmanagement	60

ABSTRACT

The purpose of this study was to investigate the current practices of material resource management in secondary schools of east hararghe zone. For this study, descriptive survey research design was used: both quantitative and qualitative data were gathered through questionnaire, interviews, observation and documents analysis. 47 teachers, 37 school administrators, and 45 student council filled in and returned the questionnaire . In addition nine woreda education office project experts and seven vice- principals were interviewed.the teachers, school administrators, and student council were sampled by available sampling woreda education office project experts were selected by availability sampling technique . The collected data were analyzed using frequencies , percentage and chi-squares. The finding of the study revealed purchasing of material resources was undertaken by inappropriate personnel . With regard to the utilization and guideline for material resources ,there was no guideline for purchasing and utilization of material resources and schools were not in position to manage their material resources properly. Storing activities were left only for storekeeper and materials in stores were not classified and codified due to lack of proper storeroom and non-involvement of concerned staff. Inventories were carried out only when needed without regular plan . The major problems affected the management of material resources were the absence of proper guideline for the appropriate purchasing and utilization of materials: the absence of the participation of stakeholders in the management of material resources lack of proper stores in secondary schools. Lack of specific responsible body for material resource management and lack of appropriate manpower for respective functions of material resource management the schools principals should involve teachers. Department heads. Non-teaching staff and pta in the process of need assessment of materials to be purchased . Material resources plan should be prepared with the active involvement of teachers, non-teaching staff. Pat and the community. This can help the performers to give full attention and follow up its implementation . Besides, the effectiveness of planning of material resources should be improved to high or above to realize educational objectives . To improve the situation, schools should have guidelines to ensure the proper purchasing and utilization of material and disposal of obsolete materials to , create conducive environment to participate the concerned bodies in the management of material resources.

1. INTRODUCTOIN

This chapter consists of background of the study, statement of the problem, objective of the study, significance of the study, delimitation of the study and definition of key terms.

1.1. Background of the Study

The role of education as human investment largely assists for economic growth and national development. The World Bank (1988:5) stated, “without education, development will not occur. Only an educated people can command the skills necessary for sustainable economic growth and for a better quality of life”. Economic development will be achieved if and only if the society gets proper education, so to achieve the educational objectives the priority should be given to minimize the scarcity of finances and inefficiency of administration practices (Tekeste, 1990). Accordingly, the teaching-learning process can be more successful in an educational institution where materials resources are available and well managed and utilized. In contrast, educational institutions with poor materials resources and physical facilities tend to be less successful (Worku, 2007).

In line with this, institutions are essentially sustainable for beneficial economic growth. They create new knowledge, skills, policies and thereby mobilize and manage the resources and deliver the services which stimulate and sustain development. Growth and prosperity are unlikely to be maintained if the institutions, which guide them are dysfunctional (Ronald, 1996).

Among the different educational inputs, material resources and physical facilities play great role in terms of achieving the intended educational objectives. Therefore a great deal of attention should be given to them to utilize properly and wisely. Nebiyu, (2000) stated that the role of educational materials in the teaching learning process is believed to be crucial and learning is believed to take place through the primary assistance of educational materials and equipment. This implies that management and utilization of school materials resources should be sufficient to create conducive condition for an effective teaching-learning process and improving the quality of education. According to the above writer, the function of educational material management includes coordination of planning, stating and controlling materials purchasing, moving, in an optimum manner so as to provide educational service at a minimum cost using various materials is necessary to create good teaching learning atmosphere and help the teacher to conduct his lesson in more meaningful and more comfortable ways. For this reason, no matter how far the objective of any educational

program is attractive, its success will greatly depend upon the quality and quantity of resources it has (Worku, 2007).

As Barnett (1996:5), all organizations have five different kinds of resources to work with. These are people, equipment, materials, money and time. Among many other educational inputs material resources play major roles in terms of achieving the intended educational objectives, so great attention should be given to them. The poor performance of education is linked to inadequate educational materials, facilities and shortage of textbooks and reference materials, which are among the major factors. 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 (Amare, 1999)

According to FDRE (1994:27), educational materials are considered as the major factors for improving the quality of education. This policy document has also stated, “in order to promote the quality, relevance and expansion of education due attention should be given to the supply, distribution and utilization of educational materials, educational technology and facilities.

The school principals, concerned administrative staff, teachers, storekeepers and any other members of the staff in the school should necessarily know what resources are required and how these resources are managed and utilized to serve the students. The material resources management ability competence and commitment of all institutional members and the principal management’s skill in particular have a great role for a better achievement of educational objectives. Regarding this, Mbamba (1992) states that, to effectively and efficiently achieve these complex educational tasks, managers have to be equipped with technical skill and knowledge in planning and use of resources earmarked for the realization of the educational objectives. Gopalakrishnan (1998) puts functions of materials management include planning, purchasing, receiving stores, inventory control, scrap and surplus disposal. Effectively and efficiently carried out of these function achieve the intended goal of the school successfully.

Therefore, to carry out its responsibilities and achieve its missions and visions, there should be an assessment of educational material resources management and utilization in secondary schools, identify the real problems and put remedial measures. From my experience, this situation is true in Eastern Hararghe Zone and other oromia zones. Poor management and

unwise utilization of educational resource is observed in some schools in Eastern Hararghe Zone. Making the school resources to be properly utilized as to realize the objective of the schools is the major responsibility of schools.

1.2. Statement of the Problem

Educational materials are not easily attained as they are precious resources. Thus knowledge of how these resources are properly managed and utilized in the education system is very important. 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 realization of educational quality and access to education is determined by the availability of material resources in the educational organizations. Besides, the extent to which an organization like educational institution attains their objectives is directly proportional to the educational resources available and their utilization (Adesina, 1990). Furthermore, Hallak (1990) pointed out that in the process of the establishment of a plan of priorities for investment in education and training, policy makers must, simultaneously, take into consideration the need for increasing the efficiency, serviceability, and functional reliability in the utilization of material resources. Therefore, the emphasis should be given to material resources management in the educational institutions to lengthen the efficiency in the usage of materials resources.

There are researches which were conducted by Worku (2007) and Takele (2008) that are related to the educational material resource management at TVET level. The result of their study indicated that managing and controlling of material resources was left to the storekeepers, the necessary guidelines to manage material resources were not disseminated to the user, most of the concerned bodies seldom participate in material resource management. However, the area of practices and problems of MRM in secondary schools was not well studied. As a result, much cannot be said on the management practices of material resources in secondary schools of Ethiopia in general and in EHZ in particular. Thus, the researcher believes that the existing gap could be filled through this study.

Moreover, the researcher as an employee in secondary school of East Hararghe Zone and working as a secondary school principal; also observed that in the school, materials are

managed to accomplish the task of teaching- learning process. The researcher also felt that materials which contribute a lot for improvement of instruction are not this much fulfilled with financial resources that exist from different sources. In addition to this, according to MoE (2010), despite significant investment of necessary materials in quality inputs, national learning assessments show deteriorating trends in students' achievement. Thus, it is necessary and reasonable to study the material resource management practices.

1.3. Research Questions

The study tried to address the following basic question

1. How is the current practice of educational material resources management in the selected secondary schools of East Hararghe Zone?
2. What are the means used in assessing needs identification for educational material resources in the secondary schools?
3. How is the level of stakeholders participation in the educational material resource management in secondary school of East hararge zone ?
- 4 What are the major problems related to educational material resources management and utilization in secondary school ?

1.4.Objectives of the Study

The main Objective of the study is to assess and investigate the practice of educational materials management in improving instruction in Eastern Hararge Zone.

1.4.1. General objective

The general objective of this study is to assess the major problems of secondary school principals in the management of material resources forward possible recommendation in secondary schools of Eastern Hararghe Zone.

1.4.2. Specific objective

The specific objectives of this study are attempted to:

1. Assess the practice of educational material resources management in selected secondary schools of East Hararghe Zone.
2. . To identify the means used in assessing the needs for educational material resources in secondary schools.
3. Examine the level of stakeholders participation in the educational material resource management.
4. To identify the major factors that hinders the management of educational material resources in selected secondary schools of East Hararghe Zone.

1.5. Significance of the Study

Educational materials are 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 is indispensable in any educational institution. Therefore, woreda education bureau more or less allocate budget per year to alleviate the shortage of educational materials.

On the other hand, it looks like that there is dissatisfaction of staffs on the availability and supply of educational materials in the 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:

- i. The study by itself will create an awareness of the existing problems.
- ii. It provides valuable feedbacks regarding the effectiveness of educational material resources management and utilization in secondary school from the respondent's point of view.
- iii. It suggests the importance of proper educational material resources management and utilization among educators and other members of the society who are directly or indirectly related to educational materials management and utilization activities.
- iv. It forwards practical solutions to alleviate the existing problems concerning the issues understudy.
- v. Research might also use the research result as a spring board or farther investigation that will lead to the improvement of educational materials and equipment management and utilization practice in an educational system

1.6. Delimitation of the Study

To make the study more manageable and feasible, the study was delimited to focus on six selected District in Eastern Hararghe Zone. These are Goro-gutu, Dadar, Kersa, Babile, Meta, Haramaya Kombolcha, Melka Belo, and Aweday. From these the study focus on 9 Secondary schools (9-10) which are Boreda, Kobo, Lange, Bisidimo, Kulubi, Adele, Kombolcha, Harawacha, and Aweday secondary school. Because, these Schools were help the researcher to get relevant information on the awareness and challenges of management of material resources in improving instruction in the zone that enrich the study. In addition

to these ,time and financial problem is the main constraints of the study that hinder researcher to make the study on all secondary schools of Eastern Hararghe Zone.

1.7. Operational Definitions of key terms

For the sake of this specific study, some important terms are selected and defined as foiiow.

East Hararghe Zone: It is one of the zonal administrative levels of Oromia Regional State which encompasses woredas and administrative towns that are found in Easter Oromia

Leader is a person that hold a dominant or superior position within its field and able to exersise a high degree of control over others

Management: is the organization and coordination of an activities in order to achieve defined objectives.

Material: refers to tools and equipment with certain physical properties that are used as inputs to services or production

Material Resource Management is the process in which an organization like educational institution uses its material resources in a proper way. It encompasses activities such as material requirement planning, purchasing, storing, utilization, inventory control, maintenance and disposal of unused material.

Participation: Is the action or state of taking part in something association with others in a relation.

Practice: it is the actual application or use of an idea ,belief, or method as opposed to theories about such application or use.

Resource: Anything in the school or its environment that may be organized for use in the process of teaching-learning in the school and that are understood as human resources, material resources, physical resources, financial and time resources are called resources.

Stakeholders: those who can affect or affected by the organization action, objectives and policies .

Utilization: is the proportion of the available time that a piece of equipment or a system is operating.

2. REVIEW OF RELATED LITERATURE

This unit mainly emphasized on “assessment of the educational material resources management in improving instruction in selected secondary schools in Eastern Hararge zone.” Therefore, the review of the related literatures attempted to indicate the main components of educational materials management.

2.1. Concept of Educational Resource

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. Now days, the social demand for education is increasing from time to time. This is because education plays a significant role in the economic and social development of people. To this end, provision of adequate resources is needed to attain the desired goals for any educational organization. These resources, according to Aggarwa (2003) include:”human resources, material resources, financial resources, information resources and time resources.” In line with this, UNESCO (2006) further clarifies that anything in the school or its environment that may be organized for the use in the teaching learning are understood as human resources, material resources physical resources are called educational resources. As it has been discussed above, resources are among the key factors in the achievement of goals in any educational institution.

2.2. Classification of Educational Material

Educational materials and equipment are essential components of educational resources to effectively conduct teaching and learning activity. They can be defined in several ways depending on the purpose of the writer. For instance, Mbamba (1992) puts educational materials or facilities as “any object or unit are as 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. Another writer Bezabeh (1990) defines materials as The whole range of goods and service which are purchased or otherwise procured form 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.

Hence, it can be said that materials are items acquired from the environment to enable the organization to carry out its function. However, different organizations utilize different types of materials 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 (Wright, 1993). On the other hand, according to Mbamba (1992) some of the materials and facilities commonly used in the education system are:-

- ⇒ Classrooms, laboratories, workshops, libraries, recreational space which serve to house instructional activities;
 - ⇒ Furniture (desks, tables, chairs, blackboards, etc);
 - ⇒ 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
 - ⇒ Raw materials consisting of organic and inorganic materials, such as chemicals any specimen of plants and animals etc.
- ⇒ In addition to materials resources, proper equipment is eventual for the orderly and efficient operation of a school and to make education worthwhile. Stoops et.al.(1982) refers it to nonexpendable items which are more or less permanent, have a long life time, and quality as a capital expenditure. They also categorize equipment into two- fixed and movable. Examples of fixed equipment are built in clock systems, counters, cabinets, and communication systems. Movable equipment includes such items as large tools, office machines, furniture, television on sets, and projectors. In a similar position, Dejnozka (1983) states equipment as “items which are (1) non expendable; (2) generally last for long period of time; (3) retain their original shape and appearance with use; and (4) more likely to be repaired than replaced if damaged. To him examples are desks, type writers, and musical instruments”. However, a more comprehensive classification is made by Jacobson et al (1973). According to them equipment is often classified as two status: permanent or movable

permanent equipment refers to articles that are part of the building: electric light fixtures, heating and ventilation fixtures, toilet fixtures, blackboards, and any other materials permanently fastened in the building and is moved only upon requisition by the principal, and then only for usually good causes. On the other hand, movable equipment refers to chairs, office furniture, projection instruments, portable radios, books, duplicating machines, and so forth. They also classified it according to its function: seating, visual aid, cafeteria, home economics, industrial arts, music, and athletics. As it is indicated by different organizations and writers, equipment is generally, a relatively permanent material that can be used beyond a year and can be reused by providing maintenance.

2.3. Educational Material Management

Material resource management directs the flow of materials and services from the supplier, and keeps track of the supplier's delivery and quality commitments, so as to avoid any disruptive surprises. Material resource management activities are frequently handled at the local or office level and involve regular communication with suppliers concerning requirements, such as order quantity and delivery dates (Leenders *et al.*, 2006)

In addition to this, Chunawalla and Patel (2006), material resource management concerned with those management functions such as planning, organizing, purchasing, warehousing, distribution, inventory controlling and disposal of material resources. These activities form the framework for studying the nature and scope of management. Similarly, Hailesilasie (1995), in schools the management of resource is mostly concerned with two basic elements; namely; human elements and non-human and other school properties.

Moreover, in Chapman and Arnold (2004), material resources management is a balancing act. This means material management is a coordinating function responsible for planning and controlling materials flow. The objective of material resource management is to be able to provide what customers want, when and where they want it; thus it maximizes the use of the organization's material resources. Furthermore, Mbamba (1992) states that material resources management 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.

Adesina (1990) explained material resources management in general as "... organization and

mobilization of all human and material resources in a particular system for the achievement of identified objectives in the system.” Thus, material resources management in general is concerned with managing human beings and materials.

In concept of having one department responsible for the flow of materials, from supplier through production to consumer is relatively new. Although many organizations have adapted this type of organization system, there are still a number of organizations which do not have. Therefore, if companies wish to minimize total costs in this area and provide a better level of customer services, they will have to move in this direction (Arnold, 1998). Moreover, a material resource management as a discipline is the flow of a system with comprehensive and feasible controls from procurement till the final goods reach at the hands of users. Hence, these activities of management of material resources require the supportive participation of students, teachers, supportive staff and the society (PTA and WETB).

The effective management of materials is crucial to the performance of many organizations. Traditionally, management devoted more time to the expenditure of moneys for personnel, plant, and equipment than for materials resources. In addition to this, material resources were thought of as cheap, readily available, and infinitely plentiful. However, the realities of the marketplace have changed this myopic view and have added material resource management to the list of major organizational functions (Richard, 1994). Furthermore, Richard pointed out that material resource management has a marvelous influence on the final cost of a product, because it handles the total flow of materials in an organization. As a result, the management of the materials flow encompasses the responsibility for planning, acquisition, storage, movement, and control of material resources.

Generally, even though writers forwarded various functions of material resources management, for most writers the major elements of material resource management includes planning, acquisition, and supplement, purchasing, production and controlling, allocation and distribution, inventory and disposal. In past times, the development of professionals in the area of materials management was not given proper emphasis particularly in Ethiopia. The materials management activities were considered as an ordinary activity and they were devoid of serious attention. However, currently, materials management is recognized as distinct area of organizations management and plays a vital role to achieve the intended goals of the organization (Ministry of Finance and Economic Development (MOFED, 2007)).

2.4. Material Resources Planning

Planning for the material resources plays an important role for the attainment of overall goals of any organization. In connection to this, Jacobs (2008) pointed out that material requirement planning is a logical, easily understandable approach to the problem of determining the number of parts, components, and material resources needed. It also provides the schedule specifying when each of these material resources, parts, and components should be ordered or produced. As reported in Gopalakrishan (1990), a material planning is the scientific way of determining the requirements of raw materials, components, spares and other tools and equipment that go in to meeting the production needs within economic investment policies.

As indicated in Richard (1994), the term material requirement planning has different meanings to different people at different times. Some think of it as an inventory system, others as a scheduling system, and still others as a complete loop production system. However, it can be all of these things, depending on the organization and the stage of its development with material resource planning. Still, most would agree that material requirement advances systems thinking and tends to become the cornerstone of the production system, in this context, the educational institutions. Furthermore, within the limits of its condition, it will reveal what is needed, how many are needed, when they are needed, and when they should be ordered.

A successful planning needs the participation of all concerned bodies. Regarding this, UNESCO (1992) states that “Planning needs participation in decision making at every stage, identification of problems, the study of feasibility, implementation and evaluation.” In the context of the secondary schools, principals, teachers, administrative workers, students and the community (PTA and WETB) should participate in material resources planning to achieve the desired objectives of the school.

2.5. Purchasing of Material Resources

Purchasing is the process of procurement of equipment, tools and materials at the right time, of right quality, in right quantity, from right source and at right price. These five ‘Rs’ consideration enables the scientific purchases (Chanuwalla and Patel, 2006). In this connection, Mahajan (2002) states that purchasing refers to the activities required for obtaining the material resources and services that are needed by the organization. Moreover, purchasing is a responsible for getting the materials, supplies and equipments of the right

quality, in the right quantities from the right source, at the right prices and at the right time popularly known as the five R's of the arts of efficient purchasing.

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 is not only concerned with the standard steps in the procurement process such as: the recognition of need, the translation of that need into a commercially equivalent description, the search for potential suppliers, the selection of a suitable source, the agreement on order or contract details, the delivery of the materials or services, and the payment of the suppliers. However, responsibilities of purchasing may include receiving, inspection, storage, materials handling, and disposal.

There are different definitions given for purchasing by different authorities. Alford and Beatty in Mahajan (2002) defined that "Purchasing is the procuring of materials, supplies, machines, tools and services required for equipment, maintenance and operation of a manufacturing plant." A more comprehensive and broad definition for purchasing is given by Westing, Fine and Zenz in Mahajan (2002) as: "Purchasing is the managerial activity that goes beyond the simple act of buying. It includes research and development the proper selection of materials and services, follow up to ensure proper and timely delivery, inspection to insure quantity and quality, development of proper procedures, methods and forms, control traffic, receiving, storekeeping and accounting operations related to purchases."

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.

2.5.1. Purchasing Procedures

Dash and Dash (2008) stated that materials should be purchased as per the specifications in the quotation approved by the purchase committee, the requirements of the institution and within the fund available for the purpose. Besides, Chapman and Arnold (2004) states that the function of purchasing is much broader and, if it is to be carried out effectively, all concerned individuals in the organization are to be involved. Therefore, obtaining the right materials, in right quantities, with the right delivery time, from the right source, and at the

right price are all purchasing functions. Moreover, the act of purchasing consists of these steps: receiving and analyzing purchase requisition, selecting the right supplier, determining the right price, issuing purchase orders, following up to assure delivery dates are met, receiving and accepting materials, and approving supplies invoice for payment.

In addition, Dereje Kebede (2006) indicated that, the purchasing procedures may vary according to the rules and regulations a country follows, the basic aim of purchasing is to ensure what is needed is made available when it is required. On the other hand, the materials to be bought should conform to the established standards and more of instructions. But the procedure for procurement of educational resource materials may vary according to the nature of education. As pointed out in Mahajan (2002), the purchasing procedures include: recognition of the need, selection of source of supply, inviting tenders, placing the order and follow up, receipt and inspection and approval of payment.

2.5.2. Purchasing Policy

Every organization has its own policies, whether they are put in to writing or not. However, an established policy eliminates the necessity of making a fresh decision every time when urgent situations arise. In contrast, a written policy ensures that decisions and actions will be consistent and such an approved policy statement gives authority to purchasers (Datta, 1988).

Accordingly, Worku Berihun (2007) indicated that there is a written guideline of purchasing educational materials in Ethiopia. However, purchasing activities made in the system which lack uniformity and create difficulty for the proper control and management of the resources available. Moreover, according to the guideline the major part of purchasing made such as a bulk of purchasing and most foreign purchases were only the responsibility of MOE and regional education bureau. Now a day, WFEDO has been given the mandate to make most of the purchases. Besides, schools are given the opportunity of small purchasing from their internal income. In general, purchasing of material resources in school should be performed through purchasing procedures and purchasing policy based on the rules and regulations in school and WFEDO practices. This will be cross checked through the study.

2.6. Utilization of Material Resources

It is necessary that educational material resources be in good working condition at all times for their effective and efficient use. 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

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.

For this reason, in order to progress the suitable use of material resources, one has to manage and make use of certain approaches. The major approaches are to make available the necessary information of what is made available at the school and what is expected of teachers, non-teaching staff, society and learners in the use and concern of the materials and facilities.

2.6.1. Storage and Handling of Material Resources

According to Chapman and Arnold (2004), material handling is the movement and storage of material resources inside the store. However, the type of material handling equipment used affects the efficiency and cost of operating the store. Therefore, the objective of warehouse is to minimize cost and minimize customer service. To do this, efficient and effective warehouse operations perform to provide timely customer service, keep track of items so they can be found readily and correctly, minimize total physical effort, and provide communication links with customers. In connection to this, Chunawalla and Patel (2006) explained that the store keeping is a service department, so the principal objective of the store function is to provide that service most economically.

Mahajan (2002) has defined storage as "...a function of receiving, storing and issuing of raw materials, tools, spares, consumables etc to the respective department." Hence, according to Maynard in Mahajan (2002), the duties of storekeepers are "To receive materials, to protect them while in storage from damage and unauthorized removal, to issue the materials in the right quantities, at the right time to the right place and provide these services promptly and at least." In addition, proper utilization of materials results in large amount of saving. Proper

storing avoids pilferage and wastage of materials. Thus, scientific and systematic method of storekeeping helps considerably in reducing materials cost and expenses.

Basically, storage of materials during the course of their movement should ensure that the correct materials are available when needed. This calls for prior knowledge of 'what and when it is required'. However, educational managers need to secure the means for proper utilization of educational materials. There should be also a good faith and cooperation between educational managers, teachers and other supportive staff regarding the utilization of educational materials and all other facilities (Haileselasse, 1995).

In the sum, to keep away material resources from unnecessary pilferage and wastage, the appropriate storing and handling mechanism should be available. Therefore, storekeepers have to take care in the process of receiving materials, protecting them while in storage from damage and illegal taking away,

2.6.2. Inventory Control

To assure the effective and efficient use of material resources, organizations should apply inventory in the process of material resources management. Inventory is the stock of any item or resource used in an organization. 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.

As indicated in Chunawalla and Patel (2006), inventory control deals with the control over raw materials, work-in-progress, finished products stores supplies, tools, and equipment. It is a systematic procedure for ensuring the availability of items necessary to meet the requirements of an organization. Thus, material resource management should consider and require that facilities are designed to safeguard for sensitive or valuable materials in the warehouse, laboratory, library, etc, from threats such as theft, fire, and corruption.

According to Mahajan (2002), inventory control may be defined 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.

The explanations provided above indicated that any institution has the accountability to safeguard its material resources. This includes accomplishment of measures for the protection of materials and uncovering of losses. One characteristic of accountability is bookkeeping for inventory. 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.

2.7. Maintenance of Material Resources

According to Gahlot and Sharma (2006), maintenance means to hold, keep, sustain or preserve equipment, building or structure to an acceptable standard of serviceability. Therefore, the objectives of maintenance are to ensure that equipment, building, and its services can perform its designed functions for the desired period of time with a high degree of reliability. Moreover, the main objectives of maintenance are prevent and slow down the rate of deterioration of materials, enhance serviceability of materials, make improvements in serviceability of materials, and preserve buildings and its services in good serviceable condition.

Moreover, Chunawalla and Patel (2006) explained that one of the most important objectives of maintenance management is to improve functional reliability of materials and spare parts. All materials are subject to wear out and corrosion, which, if not compensated by maintenance service, will sooner or later, lower down the rate of capacity as well as its ability to retain the desired level of product quality. Therefore, maintenance service extends the useful life of materials by reducing damages, helps up operational readiness of equipment, and prevents wastage of spares, tools and materials. Moreover, it assures the consistency of the degree of performance of the equipment, tools or service operations.

As the manual of MoE (2005) indicated the major school facilities and maintenance activities include buildings (classrooms, laboratories, toilets, canteens, playing fields, etc, machineries and equipments and so on. However, those educational materials may face three distinct types of failures excluding damage caused by careless handling, storage, improper utilization and handling by the user or change in operation condition. These are:

- ⇒ Early failures, due to poor design, material and workmanship;
- ⇒ Random failures, which occurs unexpectedly due to sudden stress accumulation because of over load;

⇒ Warehouse failures which are caused by ageing.

Furthermore, maintenance of materials includes activities, which are needed to allow for repair, servicing and replacement procedures. According to MoE (2005), preventive maintenance shall also be carried out for all school facilities to reduce cost of replacement of equipment; furniture and other facilities. Hence, maintenance operations of the school system associated with up keep, repair, and replacement that ensures continues usability of the physical plant, equipment and service facilities .Moreover, maintenance is restoring an asset by replacing a part which is broken or damaged, or reconditioning that part to its original or acceptable working condition.

According to Saxena (2003) maintenance of materials play the important roles in spare parts management. He emphasized that breakdown maintenance should be eliminated, and preventive and predictive maintenance should be adopted. Moreover, the preventive maintenance is to check in advance and take corrective action before the material stop functioning while predictive maintenance help in predicting the condition of the material or of its parts and to take corrective measures before the event of likely failure occurs.

Therefore, maintenance management is an orderly and systematic approach to planning, organizing, monitoring and evaluating maintenance activities and their costs. Thus, maintenance is the work performed on material resources such as buildings, tools and materials, and equipment to preserve it in as near to its original condition as is practical and to realize its normal life expectancy.

2.8. 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.

2.9. Materials Need Assessment

Assessment appears to inform decision-making in relation to allocation of resources. In connection to this, Hofmann and Darcy (2003) pointed out that the main reason for conducting a needs assessment is to inform an organizational decision about what to do in relation to a given situation. However, this is not as obvious as it may seem. Furthermore, most importantly, it implies recognition that there is a decision to be taken.

In addition to this, Chapman and Arnold (2004) reported that material need assessment help organizations in determining their material requirement. Thus, the main objective of any organizational planning and control system is to have the right materials in the right quantities available at the right time to meet the demand for the organization’s products or services. Moreover, the objective of the material need assessment is to determine what components are needed, when they are needed, and how much is needed to meet organizational objectives.

2.10. Guidelines for Material Management

As pointed out in FDRE (1994) the administration of educational institution has been decentralized. As a result, there are different guidelines by which various school level activities are managed. Furthermore, the policy document states that “Clear guidelines, stating the rights and duties of all involved in education, are issued to ensure participatory and proper professional relations in their activities.”

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.

2.11. Disposing Obsolete, Surplus and Scrap Materials

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 Alehegn, 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 Hailu (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 Tetemke (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. Finally dumping, burning, or otherwise destroying is the last alternative 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.

2.12. Materials Management in Ethiopian Context

According to Samuel Wolde (2011) training materials management in Technical, Vocational and Education Training was poorly practiced. The main objectives of his study was to

evaluate training materials management practices and its impact on the quality of trainings in government TVET colleges in Addis Ababa, and recommend ways of improving the practices of training materials management. In order to attain the objectives of the study, a descriptive survey method was employed. Out of 11 government TVET institutions in Addis Ababa City Administration three were selected by using purposive sampling techniques. The subjects of the study were 28 materials management staff, 75 department heads, 109 instructors, and 9 TVET administrators. Samples did not include administrative staff but my study included them. The instrument used to gather data for the study were questionnaire, interview, and document assessment. The result of his study indicated that there was no supply of materials in time, storage and utilization were not effective and materials were inadequate. Due to this the quality of education and training in government TVET colleges is highly affected. He suggested short term training has to be provided to materials users and materials management staff in relation to materials planning, storage, and utilization, and awareness raising work has to be done by concerned bodies such as TVET agencies and representatives in MoE. But, all materials management functions were not incorporated in his study. So the study has relation with my title that is materials management in secondary schools of East Hararghe Zone

To sum up, the above result indicates that in Ethiopia materials management practices in Educational institutions needs to be well studied and seek improvement in the ar

3. RESEARCH METHODOLOGY

This part of the study includes description of the study area, research design source of data, population, sample size and sampling techniques, instruments of data collection, procedures of data collection, methods of data analysis and ethical consideration.

3.1. Description of The Study Area

The areas was selected for this study were nine secondary schools (grades 9-10), which are found in eastern Hararge Zone. Such as Boreda, Kobo, Lange, Bisidimo, kulubi, Adele, Kombolcha, Harewacha, and Aweday

3.2. Research Design

A descriptive survey design was employed to study this problem. This design was selected for the reason that it enabled the researcher to obtain current information about the material management in selected secondary schools of East Hararghe Zone. Besides, it helps to draw valid general conclusions (Parkash, 2005). Therefore, in order to identify and analyze the existing conditions with the reviewed research findings of the past and to draw a general conclusion of the study, the researcher was interested in using this research design. Additionally, a mixed research methodology which comprises both quantitative and qualitative approach was employed. According to Jonson and Onwuegbuzie (2004) “mixed research design is the class of research design where, the researcher mixes or combines quantitative and qualitative research techniques, methods approaches, concepts or languag.

3.3 Source of Data

Both primary and secondary sources of data was used for this study.

3.3.1. Primary sources

The source of primary data was data collected from principals, vice principals, unit leaders, teachers, and student council of the sample schools.

3.3.2. Secondary sources

Secondary data was obtained from documents. In this regard, published documents related to the areas of the study was assessed at the selected secondary schools and woreda education offices. These documents include the material resource related research, manuals, existing guidelines for material resource management in schools, books, records (models), minutes, inventory reports and other important documents.

3. 4.Population, Sample Size and Sampling Techniques

Population, Sample size and sampling techniques are described below.

3.4.1. Target Population and Sample Size

In Eastern Hararghe Zone, there are 19 woredas. Out of these woredas, 9(50%) woredas were selected as a sample. The selected woredas Gorogutu, Dadar, Kersa, Babile, Meta Haramaya, Kombolcha, Melka Belo, and Aweday. In these districts, there are 28, secondary schools. From those, 9(33%) of secondary schools such as:, Boreda, Kobo, Lange, Bisidimo, kulubi, Adele, Kombolcha, Harewacha, and Aweday are selected through simple random sampling techniques. In the above selected secondary school 47 grade 10 homeroom teachers, 37 school administrators and 45 students councils total 129 respondents were selected

3.4.2. Sampling Techniques

To select the sample subject of the study, researcher was used available sampling technique. All the school principals, Vice-Principals, Unit Leaders, Homeroom teachers, School Supervisors, and student council were included in the sample study by using available sampling techniques, because they were small in numbers. Since the School principals, vice-principals, unit leaders, homeroom teachers, school supervisors, and student council were responsible to exercise functions, and manage the work of educational material resource management practices and improving instructional services in schools.

Table 1: population, Sample size and Sampling Techniques

No	Respondents	Population			Sample size			%	Sampling Technique
		M	F	T	M	F	T		
1	Homeroom Teachers	40	7	47	40	7	47	100%	Available Sampling Techniques
2	Unit Leaders	8	2	10	8	2	10	100%	
3	Principals	9	-	9	9	-	9	100%	
4	Vice-Principals	9	-	9	9	-	9	100%	
5	Supervisors	9	-	9	9	-	9	100%	
6	Students council	40	5	45	40	5	45	100%	
Total		115	14	129	115	14	129		

3. 5. Data Collection Instruments

In the process of data collection, questionnaire was used and document review and interview was conducted.

3.5.1. Questionnaire

Questionnaire was used commonly to gather data for descriptive survey. In order to gather, the appropriate information about the practices and challenges of school material resource management in secondary schools of selected woredas in Eastern Hararghe Zone, questionnaire was distributed for principals, vice principals, unit leaders, homeroom teachers, students and supervisors. Questionnaire was prepared in English language, and in Afan oromo for students as a researcher believes that they can understand the questions. Questionnaire was structured with close-ended and few open-ended type.

Fifteen items included in the questionnaires; 5-point liker scale item prepared for respondents. Because, it help to know respondents feeling and it helps the respondents to choose one option from the given scale that best aligns with their views. In addition to this, open-ended questionnaire were employed in order to give opportunity to sample study know their feelings, problems and intensions related to challenges of material resource management in secondary schools of selected District in Eastern Hararghe Zone.

To make necessary corrections and maintain the validity of the questionnaire, the drafted questionnaire were pilot tested before the final study was conducted. The pilot study was conducted in Karamille secondary school, which was out of the sampled schools. The drafted questionnaire distributed to one Vice-principal, one secondary school supervisor, 12 teachers, and totally 14 respondents were participated.

The response obtained from the participants were analyzed using chi-square. Based on the pilot test, reliability calculated and some improvements were made to enhance the clarity of statements, grammatical structures, and interpretation of instructions. Then, the revised questionnaire were administered to sample subjects of the study. Finally, the questionnaire were distributed to 47 teachers, 9 principals, 9 vice- principals, 10 unit leaders, 45 student council, and 9 secondary schools supervisors in order to collect the required research data.

3.5.2. Document Analysis

In addition to the above instruments of data collection, documents were used to gather

secondary data. Therefore, reliable information were obtained from the nine selected secondary schools. Essential documents at schools and woreda education offices were analyzed. They were inventory reports, materials procurement guidelines, plans for material resources, a guideline to dispose unused textbooks, a manual of materials supply and other relevant documents. Facts were drawn from documents. Based on document analysis data were taken for compilation.

3.5.3. Interview Guide

To collect information on the problems of principals in managing educational material resource in secondary school ,9 principals, and 9 supervisors were selected in secondary school . Semi- structured interview items were prepared for the above respondents. The reason behind the semi-structured interview items were the advantage of flexibility in which new questions forwarded during the interview based on the responses of the interviewee. The interview were conducted in their mother tongue language Afan Oromo.

3.6. Procedures of Data Collection

The procedures in the process of data collection involved four important stages .Initially, ,review of related literature were made in advanced to get information on what were 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 develop.

In the second stage, the field work was conducted for administering the instruments and collecting the required data .Before approaching respondents for data collection, the researcher was read the written consent form to respondents and was informed them about the whole nature of investigation. In the third stage, once the desired data were collected through questionnaire, interview and document, the research was perceived to processing, and analysis of data obtained through these instruments. Data gathered through interview and document analysis was analyzed qualitatively. Whereas, data obtained through questionnaire were analyzed quantitatively. Appropriate statistical tools were employed to analyze quantitative data. The last phase was interpreting the results and finding of the study and production of the research report.

3.7. Method of Data Analysis

Quantitative and qualitative method of data analysis were employed to analyze and interpret

the data. Frequencies and percentages were used for the proportion of responses of the perception of awareness, attitude towards the problems of principals managing material resources practicing and maintaining the quality of education among the respondents personal judgment, observation summary and relating opinions to fact were used in open-ended questionnaire.

The data collected through close ended questions, were tabulated, interpreted, and the interpretation was made with the help of frequency and percentage. SPSS version 16 computer program was used to compute the Chi-square value to see the significance association between the groups respondent.

3.8. Ethical Consideration

The ethical issues were given attention in the study. At the beginning cooperation letter was received from the department of educational planning and management of Haramaya University. Then, the letter was given to woreda education office and a consent letter was prepared by the researcher to help the respondents make an informed decision. Rapports was created with respondents and was encourage to fell free. In addition participation in the study was volunteer based.

4. RESULT AND DISCUSSION

This chapter deals with the presentation and analysis of data gathered from groups of respondents using questionnaire, interview, observation and documents. The questionnaire was administered to teachers, administrative staff, and student council whilst the interview was conducted with project experts of woreda education offices (previously named materials supply process owner in education office structure) and principals at the selected secondary schools. In order to get more information, documents were analyzed and observation checklist was used in selected secondary schools and woreda education offices. The first part of this chapter deals with the personal information of respondents while the second section deals with the analysis of the findings of the study in relation to the basic research questions.

4.1. Respondents Characteristics

In general, 129 questionnaires were distributed to the groups of respondents. All of these questionnaires were distributed to teachers, school administrators and student council. Finally, 47 (100%), 37 (100%), 45 (100%), of the questionnaires distributed to teachers, school administrators, and student council respectively filled out, returned and used for the analysis. All the groups of respondents of the selected secondary schools were asked to indicate their personal information in the questionnaire. Their responses were summarized as follows

Table: 2. Demographic characteristics of respondents

variable	Teachers		School Adm.		Student council		Total	
	f	%	f	%	f	%	f	%
1. Sex								
male	40	85.1	35	94.6	40	88.9	115	89.9
female	7	14.9	2	5.4	5	11.1	14	10.1
total	47	100	37	100	45	100	129	100
2. Age in <20	-				42	93.3	42	30.4
years 21-30	19	40.4	-	-	3	6.7	22	15.2
31-40	16	34	21	56.8			37	27.5
41-45	7	14.9	13	35.1			20	18.1
>46	5	10.7	3	8.1			8	7.8
total	47	100	37	100	45	100	129	100

Table 2.

3. Qualification									
Ma/Msc			3	8.1			3	2.3	
Ba/Bsc	45	95.7	34	91.9			79	61.2	
diploma	2	4.3					2	1.6	
certificate									
below					45	100	45	34.9	
total	47	100	37	100	45	100	129	100	
4. Years of service									
<6	12	25.5	-	-			12	16.1	
6-10	11	23.4	-	-			11	18.3	
10-20	14	29.5	18	48.6			32	34.4	
21-25	8	17	16	43.2			24	25.8	
>26	2	4.6	3	8.2			5	5.4	
total	47	100	37	100			94	100	

f= frequency, % = percentage

The above table focuses on the analysis of the demographic characteristics of the respondents. Regarding sex, out of the total respondents, 40 (85.1%) teachers, 35 (94.6%) school administrators, and 40 (88.9%) student council were males and 7 (14.9%) the teachers, 2 (5.4%) school administrators, and 5 (11.1%) of the student council were females. From the total respondents, the majority 115(89.9) were males and only 14 (10.1%) were females. This indicates that females' participation in the education system was not equal to that of male.

As presented in table 2, the age distribution of the respondents shows that 19 (40.4%) of the teachers were between 21 to 30 while 16 (34 %) of them were 31 to 40. The rest of them, 7 (14.9%) of the teachers were found 41 to 45 whereas only 5 (10.7%) of the teachers were 46 and above. Regarding the age of school administrators, 21 (56.8%) were between 31 to 40 while 13(35.1 %) were between 41to45. Moreover, only 3 (8.1%) were found to be 46 years of age. Concerning the age distribution of student council, 42 (93.3%) of the respondents were less than 20 whereas 3 (6.7 %) are between 21to 30. Based on this, it is believed that most of the respondents were mature enough to provide balanced opinions and suggestions regarding the issue under study.

Regarding the respondents' educational level, 45 (95.7 %), and two (4.3) teaching staff were 1st degree and diploma holders respectively. whereas 3(8.1%), 34 (91.1%), school administrators were holders of MA, and BSC holders respectively. This indicates that there was a little difference in qualifications between school administrators in secondary schools.

As the researcher obtained responses of interviewee from 6 principals, 7 vice-principals, and 6 woreda education project expert, only three principal had MA in educational leadership. The rest had BA in different subjects. This implied that majority of secondary schools were managed by individuals who lack the required skill.

Concerning years of services of the respondents, 12 (25.5%) of the teachers had served below or exactly five years and 11(23.6%) of the teachers had served from 6-10 years, 14 (29.5%) of the teachers had served from 10-20 years; the remaining 10 (21.6%) teachers had served for over 21 years. In respect to the non-teaching staff, 18 (48.6%) of the respondents had served from 10-20 years and 16 (43.2%) of the respondents had served between 21-25 years and 3 (8.2%) more than 26 years; . From these data, one can suggest that most of the groups of respondents were well experienced in the education sector. This in turn imply that they had a better understanding about a variety of issues and problems regarding the topic understudy and the responses obtained from these groups of respondents would help in receiving more persuasive information that would help the study to come up with convincing and tangible conclusions.

4.2. Material Management Functions

In this section the practice of materials management functions in secondary schools of East Hararghe Zone was discussed as follows one by one. The functions include planning, purchasing, utilization, storing, maintenance, and disposal of material resources.

4.2.1. The Means Used in Assessing Needs for Material Resource

In the review literature part of this study, it had been discussed that conducting the material requirement assessment was important for the needs assessment of the school in general and the needs of the teachers and non-teaching staff in particular which in turn contribute to the quality of materials and successfulness of the process of teaching-learning. In this regard, the views of the groups of respondents related to posed questions regarding the means used to assess the needs of materials presented below.

Table 3.1 Items Related Respondents Position Need Assessment of Material Resources

N	Question	Respondents	Response				x ²	P-va
			Yes	No	I don't know	total		
1	In your school do you conduct needs assessment for material resource to be purchased?	teachers	N 34	12	1	47	4.69	0.321
			% 72.3	25.5	2.2	100		
		School leaders	N 26	7	4	37		
			% 70.3	18.9	10.8	100		
2	Do you think that the purchase performed by your school are appropriate to the needs of teaching-learning process?	Student council	N 33	11	1	45	4.66	0.793
			% 73.3	24.4	2.3	100		
		teachers	N 24	17	6	47		
			% 51.1	36.2	12.7	100		
		School leaders	N 23	13	1	37		
			% 62.2	35.1	2.7	100		
		Student council	N 25	15	5	45		
			% 55.6	33.3	11.1	100		

According to table 3, item 1, the respondents were asked to determine whether their school conducted the needs assessment for material resources to be purchased. Accordingly, the majority, 34(72.3%) teachers, 26(70.3%) school administration, and 33(73.3%) student council responded that their school conducted the needs assessment for material resources before material and equipments were purchased. On the other hand, 12(25.5%), 7(18.9%), and 11(24.4%) teachers, school administration, and student council respectively disagree as need was not assessed in their school similarly, 1(2.2%), 4(10.8%), and 1(2.3%) teachers, school administration, student council respectively responded that they did not know whether their school conducted the need assessments for material resources to be purchased or not.

Based on the majority's responses, one can conclude that the activity of the needs assessment for material resources had been conducted in the secondary schools. The chi-square test result (P-value=0.321) also shows that there was no a significant difference among the responses of the groups of respondents at 0.05 significant levels regarding the activity of needs assessment for material resources. This indicated that the opinion provided by the groups of respondents confirmed that the school conducts the assessment for the needs of material resources. With regard to this, Chapman and Arnold (2004) reported that material need assessments help organizations in determining their material requirement. They further, asserted that it is important to have the right materials in the right quantities available at the right time to meet the demands of the organization.

As indicated in item 2 of table 3, respondents were asked to decide on whether the purchase made by their school is appropriate to the needs of the teaching-learning process or not. In view of that, most of the respondents, 17 (36.2%), 13 (35.1%) , and 15(33.3%) teachers, school administration , and student council respectively reported that the purchases made by their school were not appropriate to the needs of the teaching-learning process.

On the other hand, 6 (12.7%) teachers 1(2.7%) school administration and 5(11.1%) student council reported that they did not know whether the purchases made by their school were appropriate to the needs of the teaching-learning process or not. Still, the majority of them i.e, 24 (51.1%), 23 (62.2%), and 25(55.6) teachers, school administration, and student council respectively reported that the purchases made by their school were appropriate to the needs of the teaching-learning process.

From the total of the groups of respondents, 72 (55.8%) replied that the schools were run on the appropriate purchases to the needs of the teaching-learning process while 495(34.9%) reported that the purchases being conducted in the schools were not appropriate to the needs of the teaching-learning process. Whereas, 12 (9.3%) respondent responded as they had lack of knowledge about the issue. From the result of the responses, it is possible to conclude that the purchase made by the secondary schools seemed appropriate to the needs of the teaching-learning process.

The chi-square test result (p- value=0.556) also shows that there was no significant difference among the responses of the groups of respondents at 0.05 significant levels in respect with the appropriateness of the purchase of material resources to the needs of the teaching-learning process. The result indicated that the majority of the respondents had an awareness regarding the appropriateness of the purchases made at their school. Supporting this idea, MoE in Worku Berihun (2007) indicated that the purchasing of materials and equipment made in the education system lack uniformity and create difficulty for the proper control of the activity.

Table 3.2 Items Related Respondents response on Need Assessment of Material Resources

No	Questions	Respondents	Response							x ²	P-v
			VH	H	M	L	VL	T			
3	If your response for question 1 yes to what extent are the teaching and non teaching staff involved ?	Teachers	N 5	9	13	5	2	34	3.65	0.887	
			% 14.7	26.5	38.2	14.7	5.9	100			
		School leaders	N 7	6	8	5	-	26			
			% 26.9	23.1	30.8	19.2	-	100			
		Student council	N 5	8	13	5	2	33			
	% 15.2	24.2	39.4	15.2	6	100					
4	If your response to question number 2 is yes to what extent is the teaching learning process positively affected?	Teachers	N 4	10	7	3	-	24	3.49	0.744	
			% 16.6	41.7	29.2	12.5	-	100			
		School leaders	N 5	5	10	3	-	23			
			% 21.7	21.7	43.5	13.1	-	100			
		Student council	N 5	11	7	2	-	25			
	% 20	44	28	8	-	100					
5	how participatory in your school in material need assessment?	Teachers	N 7	7	17	13	3	47	4.66	0.793	
			% 14.9	14.9	36.2	27.6	6.3	100			
		School leaders	N 10	7	14	5	1	37			
			% 27.7	18.9	37.9	13.5	2.7	100			
		Student council	N 8	7	16	12	2	45			
	% 17.8	15.6	35.6	26.7	4.4	100					

VH=very high, H=high, M=medium, L=low, VL=very low

Concerning item 3 of table 3, respondents were asked to determine the extent of the teachers and non-teaching staff involvement in the process of needs assessment activity. In relation to this, 5 (14.7%), 7 (26.9%), 5 (15.2%), and 9(26.5%), 6(23.1%),8(24.2%)of teachers, school administration, and student council were responded very high and high respectively. Besides, 13 (38.2%), 8(30.8%), and 13(39.4%) teachers, administrative , and student council respectively responded that the extent of the participation of the teachers and non-teaching staff was average whereas 5 (14.7%), 5(19.2%) , and 5(15.2%) teachers, school administration, and student council respectively reported that the extent of the participation of the teachers and non- teaching staff was low. This shows that though there was the activity of needs assessment for material resources before purchasing was conducted, the involvement of teachers and non- teaching staff in the process of needs assessment was not as it should be.

The chi-square test result (P=0.887) also shows that there was no significant difference among the responses of the groups of respondents at 0.05 significant levels in respect with the extent of the teachers and administrative staff involvement in the process of needs assessment activity. This showing that there was a gap in participating teachers and non-teaching staff in the secondary schools which may result in inappropriate plan for material

resources which in turn affects the accomplishment of educational goals. In support of the participation the staff members in the needs assessment for material resources, Ojo and Olaniyan (2008) revealed that the staff should be involved in the process of determining material resources and facilities that are needed for the attainment of educational objectives.

The data which were collected from the interviewees also showed that the activity of needs assessment for material resources was undertaken in the secondary schools. They further explained that for the purchases which were carried out through woreda and administrative towns“ Finance and Economic Development Office (WFEDO), the woreda and administrative towns“ education offices asked the schools through letters to indicate their needs of material resources to be purchased for the schools. Then, the principals without assessing the needs of the teaching staff and non-teaching staff in the schools, they themselves decide what they believed the necessary materials and equipment for the schools. The interviewees added that the same was true for the purchases made at the school level. The principals prepared the list of materials and equipment to be purchased and presented the proposed needs of material resources to the PTA for recognition after purchasing took place. Sometimes after they made purchases of materials by themselves, the principals presented the issue for ratification to the PTA later on. This implies that the involvement of teachers and non-teaching staff in the process of needs assessment which may play significant roles was almost low.

Item 4 in the same table requested the respondents to indicate the extent of the teaching-learning process positively affected. As a result, 4 (16.6%), 5 (21.7%), 5(20%) and 10 (41.7%), five (21.7%), 11(44%) teachers, school administration and student council were responded that the extent to which the teaching-learning process is positively affected was very high and high. 7 (29.2%) teachers, 10 (43.5%) school administration, and 7(28%) replied average. Whereas the minority or three (12.5%) teachers, three (13%) school administration, and 2(8%) student council reported that the extent to which the teaching-learning process positively affected was low. The chi-square test result (P-value=0.774) also shows that there was no significant difference among the responses of the groups of respondents at 0.05 significant levels regarding the extent of the teaching-learning process negatively or positively affected in the absence or in the presence of appropriate material resources respectively. This shows that most of the respondents had clear understandings that the effectiveness of the teaching learning process was affected by the availability or an absence of material resources. Haileselesse (1995) asserted that lack of appropriate type and quantity of materials in the school could impede the attainment of educational goals.

In item 5 of table 3, respondents were asked to rate how their schools were participatory in assessing the materials need. As it is shown in table 3, 46(36%) of the total respondents that included 14 (29.8%), 17 (45.9%), 15(33.4%) teachers, school administration, and student council respectively responded high and above. About 17 (36.2%) teachers, 14 (37.9%) school administration, and 16(35.6%) student council having a total of 47 (36.4%) replied that their schools were participatory in need assessment at average level. Whereas, 35 (29.2%) that involved 16 (33.7%), six (16.2%), 14(31.1%) teachers, school administration and student council respectively responded low and very low about participation of their school need assessment. The response indicated that their schools were participatory in need assessment of materials at average level.

The chi-square result ($p\text{-value}=0.793$) shows there was no significant difference between the respondents response towards the participation of their school in need assessment.

In addition, the researcher was conducted interview with 13 principals (of which seven were vice principals) and six woreda education office project experts(previously named materials supply process owners) .They replied that the school principals identify the needs and present for PTAs at the end or at the beginning for approval. It was usual that sometimes principals present the identified needs to PTAs after materials were purchased. In some schools as the interviewee responded principals identified the needs, approved the identified needs and informed PTAs when they meet. This indicated that identified needs were approved by different authorization in secondary schools of Eest Hararghe zone.

4.2.2. Planning of Material Resources

In the review literature part of this paper, it has been discussed that Planning for the material resources plays an important role for the attainment of overall goals of any organization and that a successful planning needs the participation of all concerned bodies. Having this in mind, questions were presented to the respondents. The responses of the respondents indicated in the table 4 below and discussed respectively.

Table 4.1 Respondents position on Planning Material Resources in the Schools

N	Question	Respondents	Response					X ²	P-v
			yes	No	I don't know	Total			
1	1.Does your school planning about material resource?	teachers	N	40	3	4	47	2.78	0.595
			%	85.2	6.3	8.51	100		
		School	N	30	5	2	37		
		leaders	%	81.1	13.5	5.4	100		
		Student	N	39	2	4	45		
		council	%	86.7	4.44	8.9	100		

As depicted in table 4, item 1, respondents were asked whether their school plan for material resources or not. As the responses reported by the respondents, the majority 109(84.5%), that included 40(85.1 %) teachers,30(81.1%) school administration, and 39 (86.7%)of student council reported that their schools plan for material resources, and 3 (6.3%) of teachers, five (16.7%) school administration, and 2(4.4%) student council responded that their schools did not plan for material resources. whereas the least number 4 (8.5%) teachers, two (5.4%) school administration and 4(8.8%) of student councilresponded that they did not know whether their school plan about material resources or not. As majority tried to reply, the schools prepared a plan for the requirement of material resources .In addition the response of the groups indicated that they have knowhow about planning of material resources.

The chi-square test result (p-value=0.595) also shows that there was no a significant difference among the responses of the groups of respondents at 0.05 significant levels regarding whether their school plan for material resources or not. It indicated that most of the respondents were well informed about the preparation of the plan for material resources. On the other hand, the documents revealed that the plan for material resources was not prepared only incorporating the requirements of materials and equipment. Rather, requirements for materials were planned along with the overall activities of the school.

Moreover, the researcher was conducted interview with principals and woreda education experts. They responded that material resources plan was prepared in collaboration with other activities in annual plan rather than prepared independently. Mainly as the researcher made observation on the planning, there was no planning exercise of material resources independently in secondary schools of East Hararghe Zone. It was done by aggregate plan with the school's annual plan without a participation of teaching, non-teaching staff and other concerned bodies. As the researcher's document analysis indicates, the material

resource plan was made by aggregate with the annual plan of the school without full participation of the school society

Table4.2 Respondents response on Planning Material Resources in the Schools

N	Question	Respondents	Response							X	P
			VH	H	M	L	VL	T			
2	To what extent is the planning of material resources effective ?	H.room teachers	N 8	20	10	2		40	0.66	0.995	
			% 20	50	25	5		100			
		School leaders	N 8	14	7	1		30			
			% 26.7	46.7	23.3	3.3		100			
		Student council	N 8	20	9	2		39			
3	To what extent do teachers and administrative personnel take part in the process of planning for material and resources	H.room teachers	N 3	8	14	12	3	40	8.17	0.418	
			% 7.5	20	35	30	7.5	100			
		School leaders	N 6	4	13	7		30			
			% 20	13.3	43.3	23.3		100			
		Student council	N 2	9	13	12	3	39			
4	The extent to which the current planning process for material resources satisfying the demands of different users	H.room teachers	N 1	8	18	11	2	40	5.92	0.657	
			% 2.5	20	45	27.5	5	100			
		School leaders	N 5	6	11	6	2	30			
			% 16.5	20	36.7	20	6.6	100			
		Student council	N 2	8	17	10	2	39			
5	The similarity between what is planned and purchased item?	H.room teachers	N -	7	16	15	2	40	5.46	0.708	
			% -	17.5	40	37.5	5	100			
		School leaders	N 2	2	16	9	1	30			
			% 6.7	6.7	53.3	30	3.3	100			
		Student council	N 2	6	15	14	2	39			
	% 5.1	15.4	38.5	35.9	5.1	100					

VH=very high, H=high, M=medium, L=low, VL=verylow

Regarding item 2 of table 4, respondents were requested to rate the extent to which material resource planning of their school was effective. From the responses obtained, the majority, 8 (20%) teachers, 8 (26.7%) school administration and 8 (20.5%) student council reported as the planning of their school was highly effective. In this connection, 20 (50%) teachers, 14 (46.7%) school administration, and 20(51.3%) student council were answered as material resources planning of their school was moderately effective and 10 (25%) teachers, 7 (23.3%) school administration and 9(23.1%) student council gave their response by pointing as the planning was minimally effective. On the other hand, the small number, 2 (5%) teachers, one (3.3%) non-teaching staff and two (5.1%) student council responded as not totally effective.

Based on the results of the responses, one can conclude that the schools were not fully effective in planning for material resources. This in turn affects the type, the quantity, and the time material resources are needed for the proper implementation of the teaching-learning process. In this regard, Richard (1994) reported that an effective planning for material resources reveal what is needed, how many are needed, when they are needed, and when they should be ordered. The chi-square test at 0.05 significant levels also indicated that there was no significant difference among the responses of the groups of respondents with regard to the extent of effectiveness of planning for material resources. This shows that most of the respondents had relatively similar perception regarding effectiveness of planning for material resources in their school.

Item 3 of table 4 asked the respondents to rate the degree of participation of concerned staff in the process of planning for material resources. In this regard, 8 (20%) teachers, 4 (13.3%) administrative and 9(23.1%)of student council reported that the degree of the involvement of concerned staff in the process of planning for material resources was high. ,while 14 (35%), 13 (43.3%), 13 (33.3%) teachers, school administrators and student council respectively rated the participation of concerned staff in the process of planning for material resource at average level. On the other hand, 12 (30%) teachers, seven (23.3%) school administrators, and 12(30.8%) student council reported that the degree of participation of concerned staff in the process of planning for material resources was low. From all of the groups of respondents the majority, 40 (36.8%) of the respondents responded as average, 21 (19.3%) replied high, and 31 (28.1%) of all replied as low. This indicates that even though the plan for material resources were being prepared by the respective schools, the involvement of concerned staff in the activity of planning for material resources was average.

The chi-square test was employed and the result obtained indicated that there was no statistically significant difference among the responses of the groups of respondents with respect to the degree of participation of concerned staff in the process of planning for material resources. This confirms that most of the concerned staff was being involved in the activity of the preparation of material resource plan averagely. This may lead to the failure of the implementation of educational objectives in the school. Most interviewees also reported that the principals make some modifications to the preceding year's plan while preparing plan for material resources.

Item 4, in the same table, asked the respondents to determine the extent to which the current

planning process for material resources satisfying the demands of different users. The responses of, one (2.5%) teachers, five (16.7%) school administration, and 2(5.1%) student council reported that the extent of the current planning process for material resources satisfying the demands of different users is very high which covered 7.3% of the total respondents. Similarly, 8(20%) teachers, six (20%) school administration and 8(20.5%) student council which is 22 (20.2%) of the total respondents replied high .18 (45%) teachers, 11(36.7%) school administration and 17(43.6%) student council which covered the largest number or 46 (42.2%) of the total respondents reported that the current planning process in satisfying the demands of the users was at average level. On the contrary, 11 (27.6%) teachers, 6(20%) school administration, and 10(25.6%) student council which is 27(28.3%) of the total respondents replied as the extent was low in satisfying the demands of different users in their schools. In relation to this, the least or two(5%) teachers, two (6.7%) school administration and 2(5.1%) student council which counted 6 (5.5) of the total respondents gave their response as the current extent of planning was very low in satisfying the demands of customers.

As indicated in above from the total respondents only 45 (27.6%) rated the current material resources planning process of their schools in satisfying the demands of different users was high and above high .This shows that the current planning process for material resources fulfilling the demands of different users at average level. The chi-square test ($p\text{-value}=0.657$) also indicated that there was no significant difference among the responses of the groups of respondents at 0.05 significant levels regarding the degree of the current planning process for material resources satisfying the demands of different users. This indicated that majority of the groups of respondents had the same understanding with respect to the extent of satisfaction of the users in the current planning process for material resources.

According to item 5, in the table 4, the respondents were requested to respond on the similarity between planned materials and purchased items. In this regard, 19 (17.7%) of the total respondents replied high, 47 (43.1%) of the total respondents reported as average, and 43 (39.5%) of the total respondents gave response as low and below. There is a difference between responses of groups. This indicates what is planned and what is purchased in secondary schools is fit each other averagely. This indicates what is planned and what is purchased in secondary schools is fit each other averagely.

The chi-square test was employed and the result ($p\text{-value}=0.708$) obtained indicated that

there was a significant difference among the responses of the groups of respondents at 0.05 significant levels with respect to the extent of the similarity between planned materials and purchased items. This revealed that most of the respondents had almost the different opinion regarding the extent of resemblance of materials and equipment in the plan and those purchased items.

4.2.3. Purchasing and presence of guidelines of material resources management

In the review literature part of this thesis, it was reviewed that purchasing is one of the major activities of material resource management functions that goes beyond the simple act of buying. 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 in the table 5 below.

Table 5:1 Items Related to respondents position Purchasing of Material Resources.

N	Question	Respondents	Response							
			yes	No	I don't know	total	X2	P-value		
1	1. In your school is there purchasing guide line for proper purchasing of material resources	Teachers	N 25	10	12	47	1.82	0.768		
			% 53.2	21.3	25.5	100				
		School leader	N 25	5	7	37				
			% 67.6	13.5	18.9	100				
		Student council	N 27	8	10	45				
			% 60	17.8	22.2	100				
		Teachers	N 8	35	4	47			12.85	0.012
			% 17	74.5	8.5	100				
School leader	N 18	16	3	37						
	% 48.6	43.2	8.1	100						
	2. In your school is material resource purchased on time?	Student council	N 9	33	3	45				
			% 20	73.3	6.7	100				
		Teachers	N 21	12	14	47			5.61	0.352
			% 44.7	25	29.8	100				
School leader	N 25	8	4	37						
	% 67.6	21.6	10.8	100						
	3. Does your school prepare specification for material resources to be purchased	Student council	N 24	10	11	45				
			% 53.3	22.2	24.5	100				

Item 1, in the table 5, deals with the presence of any purchasing guideline for proper purchasing of material resources. Accordingly the majority, 77 (59.7%) of the groups of respondents confirmed the existence of the guideline in their school. Whereas, equal number of the total respondents which means 23 (17.8%) of the total respondents replied no guideline and 29 (22.5%) of the total respondents reported as they did not know whether there is a guideline or not in their school.

The result obtained from the respondents indicated that the existence of the purchasing guideline in the school. The chi-square test in this regard was employed and ($\chi^2 = 1.82$ and p-value of 0.768) was found at $\alpha = 0.05$ significant levels shows that there is no statistically significant difference among the responses of the groups of respondents with respect to the presence of any purchasing guideline for proper purchasing of material resources in the school. It indicated that there might be lack of awareness among the respondents concerning the existence of guideline for purchasing of materials and equipment. It might also indicate that most of the teaching staff had no exposure to the guideline. Regarding the availability of guidelines, the FDRE (1994) stated that there are different guidelines by which various school level activities are managed.

As the researcher made an observation and conduct interview with principals and expert in education bureau there is only a guideline of purchasing which was found in woreda finance and economic development office. The interviewee said as the guideline was not favorable to use in educational organization due to its complex nature and much of its nature fit with business organization rather than secondary schools.

As it is indicated in the table 5 item 2, the respondents were asked to respond on whether the material resources and equipment purchased on time or not. Regarding this, the majority that covered 84 (65.1%) of the total respondents confirmed that the material resources and equipment were not purchased on time in the secondary schools. On the other hand 35 (27.1%) of the total respondents gave their responses as materials and equipments were purchased on time in their school. whereas, seven (10.8%), reported that they do not know whether the material resources and equipment purchased on time or not. From this one can conclude that the purchase of material resources and equipment are delayed.

The chi-square test was employed and the result obtained ($\chi^2 = 12.85$ and p-value = 0.012) indicated that there was highly significant difference among the responses of the groups of respondents at 0.05 significant with respect to whether the purchase of material resources and equipment are being undertaken on time or not. On one way, this indicates teachers, school administrators, and have different opinion on the issue. In addition, the above result shows that most of the respondents were not well informed regarding the purchase of materials in terms of time.

Therefore, the delay of materials in turn might influence the process of teaching-learning of the schools. In this connection, Haileselassie (1995) reported that organizations that provide

education need to have the appropriate quantity and quality of materials and equipment on proper time; otherwise the accomplishment of educational objectives will be hampered.

As indicated in the same table 5, Item 3, the respondents were asked to decide on whether their schools prepare specification for material resources to be purchased or not. With this respect, the majority, 70 (54.3%) of the groups respondents replied as there was specifications in their schools for materials to be purchased, whereas 30 (23.4%) of the total respondents reported as there was no specification for materials. The remaining 29 (22.3) of the groups respondents confirmed as they do not know whether there is specification for materials to be purchased or not in their secondary schools. From the results obtained, it is possible to say that the activity of the preparation of the specification for material resources was not participatory.

The chi-square test result ($\chi^2 = 5.62$ and $p\text{-value} = 0.230$) also shows that there was statistically significant difference at 0.05 significant levels among the responses of the groups of respondents with respect to the preparation of specification for material resources to be purchased. This shows that most of the teaching staff had no idea concerning the preparation of specification. Therefore, the specification for materials was being prepared without involving the important stakeholders. The documents also revealed that there was the activity of the preparation of the specification for the materials purchased through woreda finance and economic development offices while there were no tangible evidences showing the preparation of the specification for the school level purchases which might lead to inappropriate type and quantity of purchase of materials in the school.

As the researcher made observation, interview and document analysis there was no any prepared specifications regarding materials to be purchased. Therefore the researcher's observation, interview, and document analysis revealed no adequate specification has made for school materials to be purchased.

Table 5:2 Items Related to Purchasing of Material Resources.

N	Question	Respondents	Response							
			VH	H	M	L	VL	T	X	P
4	If number 1 is yes to what extent is the existing guideline applicable	Teacher	N 2	9	10	2	2	25		
			% 8	36	40	8	2.8	100	5.54	0.669
		School leaders	N 7	7	9	2	-	25		
			% 28	28	36	8	-	100		
	Student council	N 4	10	9	2	2	27			
		% 14.8	37	33.3	2.7	2.7	100			

VH=very high, H=high, M=medium, L=low, VL=very low

Item 4 in the same table requested the respondents to respond on the extent to which the existing purchasing guideline was applicable. In this respect, 13(16.9%) of the total respondents reported that the degree to which the purchasing guideline was being used was very high which. Whereas, the small number, (5.2%) of the total respondents reported as, the applicability of the purchasing guideline was very low. On the other side 26 (33.8%) out of the total respondents rated as high. while 6(7.8%) of the total respondents respectively replied as low. Furthermore, 28 (36.4 %) of the total respondents responded as average. The chi-square test was employed and ($\chi^2 = 5.54$ and $p\text{-value} = 0.699$) at 0.05 significant levels also indicated that there was no significant difference among the responses of the groups of respondents about the extent to which the existing purchasing guideline was applicable. This shows the perception of most of the respondents regarding the extent of the applicability of the purchasing guideline was the same.

The interview conducted with principals and woreda education office project expert (previously named material supply process owners) regarding the availability of purchasing guideline for material resources and the data obtained from open-ended questions confirmed that some of the respondents revealed the existence of the guideline while others replied the non-existence of the guideline in their respective schools and they revealed that the purchasing guideline used for the purchases of material resources was found at woreda finance and economic development offices and asserted the absence of it in the secondary schools. Most of the interviewees who confirmed the existence of the purchasing guideline at woreda finance and economic development offices further indicated that the rules and regulations followed for the purchase of material resources were affecting the purchase of time, and the distribution of material resources which in turn affects the proper utilization of material resources to enhance the implementation of the schools' plan in particular and the attainment of educational goals in general. Contrary to the perception of teachers, non-teaching staff, and student council, regarding the purchases made at the school, the interview conducted assured that the guideline for purchasing was not being followed. Most of the purchases made at the school done through inappropriate personnel. The activity of purchasing of materials and equipment was undertaken through a person represented by school committee without the endowment of the required professional skill. Moreover, most of the material resources purchased lack appropriate quality.

The documents about educational material resource also revealed that there was no a guideline in most of the secondary schools understudy and at woreda education offices. Though, MoE in Worku (2007) reported that there is a written guideline for purchasing

educational materials in Ethiopia, there was no guideline available in most of the schools and at the woreda education offices understudy.

As depicted in item of table , respondents were requested to indicate the appropriate body for the preparation of the specification for materials to be purchased. In this regard, 6(28.6%) teachers, 5(20%) school administration and 8(33.3%) of student council respectively suggested that principals were responsible bodies to prepare their schools materials specification. In addition, 4(19%), 8(32%), 3(12.5) of teachers, school administration, and student council respectively reported that it was PTA members who is responsible body to prepare specifications for materials to be purchased for secondary schools whereas, 5 (23.8%) teachers, 4(16%) school administration and 5(20.8%) student council replied that administrative and finance personnel's was responsible bodies for the issue stated in above. The rest 4 (19%) teachers, 8 (32%) school administration 4(16.7%)of student council confirmed that woreda finance and economic development office was the responsible body to prepare specification for materials to be purchased in secondary schools. In other words, out of the total groups of respondents, 20(25.5%), 16(20.9%), and 18(26.9%) were respectively confirmed as the responsible body to prepare specification of materials to be purchased in secondary schools as principals, PTAs, administrative and finance personnel, and woreda finance and economic development office respectively. This shows that the preparation of the specification for material resources should be undertaken in collaboration with important groups of the school community.

The chi-square test ($\chi^2 = 8.88$ and $p\text{-value} = 0.352$) also shows that there was no statistically significant difference at 0.05 significant level among the responses of the groups of respondents with respect to suggesting the appropriate body for the preparation of the specification for materials to be purchased.

4.2.4. Utilization and Guideline of Material Resources

In chapter two of this study, it has been discussed that the proper utilization of the material resources is very important because of its role in the achievement of educational objectives and goals. The presence or the absence of the proper utilization of material resources affects the achievement of educational goals. Based on this, respondents were asked to provide responses on the activities with respect to the utilization of material resources. The responses obtained are presented here under in table 6

Table 6:1 Issues Related Utilization of Material Resources in the School

N	Question	Respondents	Response					x ²	P-value
			yes	No	Don't know	total			
1	Does your school have any guideline for proper utilization of material resources?	Teachers	N 22	13	12	47	3.70	0.448	
			% 46.8	27.7	25.5	100			
		School leaders	N 25	6	6	37			
			% 67.6	16.2	16.2	100			
		Student council	N 24	11	10	45			
			% 53.3	24.4	22.2	100			

As it is indicated in table 6, item 1, the respondents were asked to show their reply on whether their school has any guideline for proper utilization of material resources. From the responses obtained from the total respondents, the majority, 71 (55%) of the groups of respondents reported as yes whereas 30(23.3%) of the groups of respondents replied as no, the least, 28 (21.7%) of the groups of respondents responded as they do not know. From the responses of the majority of the respondents, it is possible to say that the guideline for proper utilization of material resources is available in the secondary school.

The chi-square test result ($\chi^2=3.70$ and $p\text{-value}=0.448$) also shows that there was no statistically significant difference among the responses of the groups of respondents at 0.05 significant levels regarding the availability of a guideline for proper utilization of material resources. This indicates that most of the respondent groups have the same opinion and awareness regarding the availability of the guideline. However, observation, the documents and interview conducted revealed the absence of the guideline for the proper utilization of material resources.

Table 6:2 Issues Related Utilization of Material Resources in the School

N	Question	Respondents	Response							x ²	P-val
			VH	H	M	L	VL	T			
2	If your response to question number 1 is yes to what extent. is the guideline effective?	Teachers	N 1	6	10	4	1	22	9.26	0.321	
			% 4.5	27.3	45.5	18.2	4.5	100			
		School leaders	N 7	5	8	3	2	25			
			% 28	20	32	12	8	100			
		Student council	N 1	8	10	4	1	24			
			% 4.1	33.3	41.6	16.7	4.1	100			
3	To what extent do users accountable for misuse of material resources in your school?	Teachers	N 4	8	18	12	5	47	7.24	0.511	
			% 8.5	17	38.3	25.5	10.6	100			
		School leaders	N 8	10	13	4	2	37			
			% 21	27	35.1	10.8	5.1	100			
		Student council	N 5	9	16	10	5	45			
			% 11.1	20	35.6	22.2	11.1	100			
		% 1.2	16.2	40.5	16.3	8.1	100				

Table 6.2 continuous

N	Question	Respondents		Response							x ²	P-val
				VH	H	M	L	VL	T			
4	To what extent are teachers and non-teaching staff involved in realizing the proper utilization of material resources?	Teachers	N	2	11	21	10	3	47	8.5	0.386	
			%	4.5	23.4	44.7	21.3	6.4	100			
		School leaders	N	7	6	15	6	3	37			
			%	1.2	16.2	40.5	16.3	8.1	100			
		Student council	N	2	13	18	9	3	45			
			%	4.4	28.9	40	20	6.7	100			
5	How is the adequacy level of material resources in your school?	Teachers	N	3	9	21	9	5	47	6.65	0.575	
			%	6.4	19.1	44.7	19.1	10.6	100			
		School leaders	N	4	13	15	4	1	37			
			%	10.4	35.1	40.5	10.8	2.7	100			
		Student council	N	3	9	10	9	5	45			
			%	6.7	20	42.2	20	11.1	100			

Item 2 of the same table requested the respondents to indicate the extent to which the guideline was being practiced in their school. In this way, the majority 28(39.8%) of the total respondents group replied high and above but 15 (21.1%) of the total respondent groups confirmed as the effectiveness of the guideline was low and below that whereas 28 (39.4%) of the respondent groups responded average. From this we can conclude that there was no gap in the extent of the implementation of the guideline. The chi-square test was employed and the result obtained ($\chi^2 = 9.26$ and $p\text{-value} = 0.321$) indicated that there was no significant difference among the responses of the groups of respondents at 0.05 significant with respect to the extent to which the guideline was being practiced in their school. This shows that most of the respondents perceived the issue almost in a similar way revealing the non-existence of the gap in the extent of the implementation of the guideline. The differing opinion reveals that the absence of a guideline.

The data obtained from interview conducted with principals, woreda education office expert and observation and documents revealed the absence of the guideline without any hesitation.

In item 3, in the same table, the respondents were also asked to indicate the extent to which the users are accountable for misuse of material resources in their school. In this respect, 47 (36.7%) of the total groups reported as average while 26 (20.2%) of the total groups of respondents reported as low whereas 8 (17.1%) teachers, ten (27%) school administration 9(20%) student council replied as high. Besides, 17(13.2%) of the total respondents confirmed very high where 9 (9%) responded very low. From this one can conclude that

the accountability of users for the misuse of material resources in their school was average. The chi-square test result ($\chi^2 = 7.24$ and $p\text{-value} = 0.511$) was found at $\alpha = 0.05$ significant levels also shows that there was statistically no significant difference among the responses of the groups of respondents regarding the accountability of users for the misuse of material resources. This indicated that there was a similarity of opinion among most of the respondents regarding the accountability of users for the misuse of material resources.

As depicted in item 4 of table 6, respondents were requested to rate the extent to which teachers and non-teaching staff of their school involved in realizing the proper utilization of material resources. Accordingly, the highest of the total groups respondent 54 (42%) reported that the extent of participation was average. On the other hand, 30 (23.2%) of the total groups respondents that replied that the extent of participation of teachers and non-teaching staff in realizing proper utilization of material resources was high whereas replied the extent as it was low having the total of 25 (19.4%). The least number 11 (8.7%) the total groups respondents rated very high while 10 (8%) of the total groups respondents that resulted confirmed the extent was very low. From the responses of the respondents one can conclude that the extent of participation of teacher and non-teaching staff was average. The majority of the respondents have similar catch up about the extent of participation.

The chi-square test was employed ($\chi^2 = 8.50$ and $p\text{-value} = 0.386$) shows there was no statistically significant difference between the respondents groups at $\alpha = 0.05$ significance level.

According to item 5 of table 6, the respondents were requested to indicate the adequacy level of material resources in their school. In this regard, 21 (44.7%), 15 (40%), and 19 (42.2%) teachers, school administration, and student council respectively reported that the adequacy level of material resources in their school was average. Whereas, 12 (25.5%) the teachers, 17 (45.1%) school administration 12 (26.6%) student council reported as high and very high. Besides, 14 (29.7%) teachers, five (13.5%) school administration and 14 (31.1%) student council having a total of 33 (25.5%) respectively replied the adequacy level of material resources in their school as low and very low. The response indicated as the adequacy level of materials in their schools was average.

The chi-square test ($\chi^2 = 6.65$ and $p\text{-value} = 0.575$) at 0.05 significant levels also indicated that there was no significant difference among the responses of the groups of respondents about the adequacy level of material resources in the schools which shown the similarity among the opinion of most of the respondents. This indicates that the adequacy level of the

material resources of the schools was intermediate which might hamper the fulfillment of educational objectives. Adesina (1990) reported that the extent to which an organization like educational institution attains their objectives is directly proportional to the educational resources available and their utilization.

According to most of the interviewees, data gathered from open-ended items, and researchers observation results there were shortages of textbooks, scarcity of reference materials to support the effort of teachers and students, inadequacy of furniture, shortage of library aids and lack of laboratory materials and chemicals in the laboratory room. Besides, guideline of purchasing, guideline of storage, guideline of utilization, guideline of disposal, science kits, and overhead projectors did not exist at all during observation.

Besides, most of the interviewee responded as the available material resources in the school were being utilized effectively for the purpose of teaching-learning process at average level. This indicated that the extent to which the available material resources are being utilized effectively for the purpose of teaching-learning process was not as it is to be (high extent)

4.2.5 Storage and Handling of Materials

In review literature parts of this study it has been discussed that in facilitating the teaching and learning process stores are responsible for safe and technical sound storage of all materials. The storing activity must protect materials in its custody against pilferage; unauthorized usage and unnecessary damage or deterioration. With this concept question related to storage of materials were posed to respondents and discussed here under.

Table 7:1 Items Related to Storage of Material Resources

N	Question	Respondents	Response			Total	χ^2	P-v
			yes	No	I don't know			
1	In your school is there any storage facility for materials ?	teachers	N 36	10	6	47	2.25	0.690
			% 66	21.3	12.8	100		
		School leaders	N 22	11	4	37		
			% 59.5	29.7	10.8	100		
2	In warehousing/storage are materials properly arranged and recorded?	Student council	N 33	8	4	45	3.85	0.427
			% 73.5	17.8	8	100		
		teachers	N 16	25	6	47		
			% 34	53.2	12.8	100		
		School leaders	N 18	17	2	37		
			% 48.6	45.9	5.4	100		
		Student council	N 14	27	4	45		
			% 31.1	60	8.1	100		

As depicted in item 1 of table 7, respondents were requested to indicate their awareness about presence or absence of materials storage facility in their schools. On this base, the majority 86 (66.7%) responded as there was storage facility for materials in their schools whereas 29 (22.5%) respectively responded no. On the other hand 14 (10.9%) from groups of respondents replied as they do not know whether there was materials storage facility or not in their schools materials. As the responses indicate there is significant difference between the responses of the respondents in relation to materials storage facility presence or absence in secondary schools.

The chi-square test result ($\chi^2 = 2.25$ and $p\text{-value} = 0.690$) also shows as there was no statistically significant difference among the responses of respondent groups at $\alpha = 0.05$ significance level indicates that majority of the respondents have the same knowhow about the storage facility presence or absence. The difference may result from lack of awareness of some student council due to their position to know the detail information of the school.

As the researcher made observation in sample secondary schools and observed the status of storage facility, majority of them were poor in storing. Materials were mostly accumulated in small storeroom, pedagogical center, and sport department. In all secondary schools visited by the researcher, a storeroom is small and inconvenient for storage of materials due to its smallness and un fulfillment of materials handling equipment.

In the same table of item 2, respondents were requested to reflect their opinion whether materials are properly arranged and recorded or not. As a result, the majority 69(53.4%), reported negatively. Whereas, 48(37.2%), 18 (48.6%), and 14(31.1%) the teachers, school administration, and student council respectively replied positively. The remaining 12 (9.3%), responded as they do not know whether materials in their warehouse are properly arranged and recorded or not. As it was figured in above, there is a similarity of knowhow among response of the groups. The response obtained from respondents indicated that materials are not arranged and recorded properly in secondary schools under the study.

Chi-square test result ($\chi^2 = 3.85$ and $p\text{-value} = 0.427$) showed that there was no significant difference between the responses of the respondent groups at 0.05 significance level.

Table 7:2 Items Related to Storage of Material Resources

N	Question	Respondent		Response					Total	X ²	P-v
				Very high	High	Medium	Low	Very low			
3	If your response to question no 1 yes how do you rate classification and codification practice of material in store	teachers	N	3	7	11	8	2	31	5.54	0.699
			%	9.7	22.6	35.5	25.8	6.5	100		
		School leaders	N	2	2	8	8	2	22		
			%	9.1	9.1	36.4	36.4	9.1	100		
			Student council	N	5	8	10	9	1		
%	15.2	24.2	30.3	27.3	3	100					
4	Practice of handling and storage of material resource	teachers	N	2	10	17	13	5	47	2.21	0.975
			%	4.3	21.3	36.2	27.7	10.6	100		
		School leaders	N	3	6	14	11	3	37		
			%	8.1	16.2	37.8	29.7	8.1	100		
			Student council	N	1	10	16	13	5		
%	2.2	22.2	35.5	28.9	11.1	100					

In item 3, of table 7, the respondents were requested to share how materials were classified and coded in their stores. In this regard 27 (31.3%) of all respondents replied as the rate of classification and codification was very high and high. Whereas the others who counted the total 29 (33.7%) confirmed that the rate was average. On the other hand, 30 (34.9%) of the total respondents reported low and very low for the status of classification and codification practice of their stores. As indicated in responses of the respondents the rate of codification and classification was more of low. There is no variation between the groups responses. Numerous respondents have similar opinion about issue. Besides, chi-square test was employed ($\chi^2 = 3.91$ and $p\text{-value} = 0.865$ indicated that there was no a significant difference among the groups respondents at 0.05 significance level.

In the same table of item 4, respondents were requested to rate the performance of their school in handling and storage of material resources. In this regard From all respondents, 47 (36.4%) rated average, 50 (34.5%) rated low and very low. The remaining 32 (24.9 %) responded high and very high. The response implied that the performance of secondary schools in the activities of handling and storage of material resources was average.

The chi-square test was employed and the result obtained ($\chi^2 = 2.21$ and $p\text{-value} = 0.975$) at 0.05 significance level indicated that there was no statistically significant difference among the responses of the groups of respondents regarding the effectiveness of secondary schools with respect to the handling and storage of material resources.

In item 5 of the same table, respondents also requested to tell the methods they used to in

and out materials to the stores and out of the stores. As a result, the majority 77 (59.7%) responded that their schools used legal models to in and out materials whereas 19 (14.7%) of the respondents confirmed that their schools used locally made formats. Besides 24 (18.6%) reported as they do not know what methods their schools used to enter the materials to the store and move out of the store. The least number of the respondents 5 (10.6%) teachers, and 4(8.9%) student council confirmed as there is any recording practice in their schools. The responses of the groups showed that legally made formats were used to in and out the materials in stores. The chi-square test result ($\chi^2 =9.15$ and $p\text{-value}=0.165$) indicated that there was no statistically a significant difference between the responses of the groups at 0.05 significance level. The majority of the groups" respondents had similar opinion about the methods they used to in to the store and out of the stores.

As the researcher made observation of stores and document analysis when the schools receive an item including the newly purchased one, model 19 was used. When any type of property is acquired or purchased should be registered and submitted as a school property with the use of model 19. Whereas model 22 was used to outgoing materials from the stores and utilize for teaching learning activities. After the request of materials is approved by the head of the school or the organization, the storekeeper deliver the required materials for the teachers / other customer by filling the items on model 22. Both model 19 and model 22 are legal models used in the schools to in and out materials of the stores.

4.2.6. Maintenance of material resources

In the review literature part of this study, it has been discussed that maintenance as the material resource management function is the operations of the school system associated with up keep, repair, and replacement of material resources that ensures continuous usability of them. With this perceptive, questions concerning the maintenance of material resources were posed to respondents. The responses collected are discussed in table 8.

Table 8:1 Items Related to Maintenance of Materials Resources

N	Question	Respondents	Response				x ²	P-value
			Yes	No	I don't know	total		
1	Are the available material resources of your school maintained timely ?	Teachers	N 19	23	5	47	7.75	0.101
			% 40.4	48.9	10.6	100		
		School leaders	N 23	8	6	37		
			% 62.2	21.6	16.2	100		
		Student council	N 20	21	4	45		
			% 40.4	46.7	8.9	100		

As can be seen from table 8, item 1, the respondents were requested to respond on whether the available material resources of their school get timely maintenance or not. From the total respondents, 62 (48.1%) reported the existence of timely maintenance of available materials while 52 (40.3%) the respondents responded the non-existence of timely maintenance of available materials in their schools. The remaining 15 (11.6%) reported that they do not know whether the available material resources of their school get timely maintenance or not. As indicated in the results of respondents, there was a difference between the responses of the groups. They had different opinion whether available materials in their schools got timely maintenance or not. The difference occurred due to majority of teachers replied as there was no timely maintenance because of their day to day knowhow to the activity under discussion. Therefore, the responses obtained revealed that the activity of maintenance was not undertaken on proper time.

The chi-square test was employed and the result obtained ($\chi^2 = 7.75$ and $p\text{-value} = 0.101$) at 0.05 significant levels also shows that there was no statistically significant difference among the responses of the groups of respondents respecting the timely maintenance of the available material resources of the school. Accordingly, it indicated that there was the same of opinion among the majority of the respondents. MoE (2005) suggested maintenance for all school facilities even before the occurrence of further damage to reduce cost of replacement of materials and equipment.

The data obtained through open-ended questions also revealed that most of the activities of maintenances of material resources do not take place on proper time. The interview administered with the principals and woreda education office experts indicated that most of the time school administrators order purchases instead of conducting maintenance of material resources and equipment exposing the school for unnecessary expenses. Besides, the researcher conducted observation and added that there are a great deal of materials and equipment in the stores which need easily available spare parts or accessories to be functional. Type writer, computers, desks, drill and duplication machines are some of the materials that practically seen during observation conducted by the researcher.

Table 8:2 Items Related to Maintenance of Materials Resources

N	Question	Respondents	Response						x ²	P-v	
			VH	H	M	L	VL	T			
2	If your response to question no 1 is yes to what extent is the maintenance of material recourse?	Teachers	N	2	7	8	1	1	19	5.14	0.744
			%	10.5	36.8	42.1	5.3	5.3	100		
		School leaders	N	2	5	13	3	-	23		
			%	8.7	21.7	56.5	13.1	-	100		
		Student council	N	3	8	7	1	1	20		
			%	15	40	35	5	5	100		
3	What is the efficiency of your school regarding the maintenance of material resources ?	Teachers	N	1	9	23	12	2	47	6.81	0.557
			%	2.1	19.1	48.9	25.5	4.4	100		
		School leaders	N	5	6	17	8	1	37		
			%	13.5	16.2	45.9	21.6	2.7	100		
		Student council	N	1	9	22	12	2	45		
			%	2.2	17.8	48.9	26.7	4.4	100		
4	The extent of the participation of teachers and non-teaching staff in the activity of maintainace of material resource ?	Teachers	N	1	8	22	12	4	47	17.8	0.023
			%	2.1	17	46.8	25.5	8.5	100		
		School leaders	N	9	4	16	7	1	37		
			%	24.3	10.8	43.2	18.9	2.7	100		
		Student council	N	1	8	21	11	4	45		
			%	2.2	17.8	46.7	24.4	8.9	100		
5	Practice in maintenance of materials ?	Teachers	N	1	5	14	23	4	47	2.35	0.969
			%	2.1	10.6	29.8	48.9	8.5	100		
		School leaders	N	1	5	15	13	3	37		
			%	2.7	13.5	40.5	35.1	8.1	100		
		Student council	N	1	5	13	22	4	45		
			%	2.2	11.1	28.9	48.9	8.9	100		

N= number, %= percentage, vh=very high, h=high,M=medium,L=low, VL=very low

In the same table, item 2, respondents were requested to indicate the extent of the effectiveness of the maintenance activity in their school. Accordingly, the highest number of

the groups respondents, 28(45.2%) confirmed the degree of effectiveness of the maintenance activity of their school as average. On the other hand with a total of 27 (43.6%) replied as high and very high. On the contrary, the least number, with a total of 7 (11.3%) reported that the extent of effectiveness of the maintenance activity of their school was low and very low. Therefore, it looks like that the maintenance activity of materials in secondary schools was effectively performed averagely.

The chi-square test was employed and the result obtained ($\chi^2=5.14$ and $p\text{-value}=0.743$) indicated that there was no significant difference among the responses of the groups of respondents at 0.05 significant regarding the extent of the effectiveness of the maintenance activity in their school. It indicated that most of the groups of respondents have shown the agreement of opinion with regard to the extent of the effectiveness of the maintenance activity.

In table 8, item 3, the respondents were requested to rate out the degree of the efficiency of their school regarding the maintenance of material resources. In this regard, 62 (43.8%) replied that the extent of the efficiency of their school regarding the maintenance of material resources was average while 30(23.2%), rated as high and very high. At the same time 37 (28.6%) responded as low and very low. As it was stated in the above, majority of the respondent groups have similar opinion about the efficiency of their school regarding the maintenance of material resources. The obtained response indicated that the degree of the efficiency of their schools in maintenance of material resources was average.

The result obtained from the chi-square test ($\chi^2 =6.81$ and $p\text{-value}=0.557$) indicated that there was no significant difference among the responses of the groups of respondents at 0.05 significant levels regarding the extent of the efficiency of their school with respect to the maintenance of material resources. Most of the respondents had almost the same understanding on the degree of the efficiency of their school regarding the maintenance of materials and equipment.

In item 4 of table 8 respondents were requested to rate the participation of teachers and non-teaching staff of their schools in the activity of maintenance of material resources. Regarding this majority, 59 (45.7%) of the respondents reported as the participation of teachers and non-teaching staff in the activity of material resource maintenance was an average. Besides, 31 (24.1%) of the respondents rated high and very high. On the other hand, 39(30.1%) confirmed low and very low the extent of participation of teachers and non-teaching staff towards maintenance of material resources. As it was indicated in the

respondents' responses the extent was average. There was statistically a significant difference between the respondent groups. The respondents had no similar opinion about the extent of participation of teachers and non-teaching staff in the activity of maintenance of material resources. The chi-square test was employed and the result obtained ($\chi^2 = 17.79$ and $p\text{-value} = 0.023$) indicated that there was a statistically significant difference between the respondents groups at 0.05 significance level.

As it was shown in table 8, item 5, the extent of the practice of secondary schools in the maintenance of material resources was shown to be under a serious problem. The majority, 69 (50.7%) confirmed the extent of the performance of secondary schools in the maintenance of material resources as low and very low. Whereas 42 (32.6 %) rated as average. Moreover, 18 (13.9%) reported as high and very high. From all respondents, 69 (53.5%) of the groups of respondents reported as low and very low. This implies that the schools were not effectively performing the maintenance of material resources.

The chi-square test ($\chi^2 = 2.35$ and $p\text{-value} = 0.969$) at 0.05 significant levels also shows that there was statistically no significant difference among the responses of the groups of respondents regarding the effectiveness of secondary schools with respect to the maintenance of material resources showing the similarity in the opinion of most of the respondents with respect of the effectiveness of the schools in the maintenance of material resources.

4.2.7. Inventory 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 9:1 Items Related to Inventory Control of Material Resources

N	Question	Respondents	Response						
			Yes	No	I don't know	total	χ^2	P-value	
1	Is there any controlling mechanism for proper utilization of available resources in your school?	Teachers	N	26	9	12	47	2.65	0.619
			%	55.3	19.2	25.5	100		
		School leaders	N	26	6	5	37		
			%	70.3	16.2	13.5	100		
		Student council	N	25	9	11	45		
			%	55.6	20	24.4	100		

In item 1 of table 9, respondents were requested to give their opinion whether there is a controlling mechanism for proper utilization of available material resources in their schools or not. In this regard, the majority 77 (59.7) responded that there is a controlling mechanism for proper utilization of available resources in their schools whereas 24(18.6%) of the total respondents reported that there is no controlling mechanism for proper utilization of available resources in their schools. The remaining 28 (21.7%) replied as they do not know whether there is a controlling mechanism or not for proper utilization of available resources in their school. The interpretation is that majority of the respondent replied there is a controlling mechanism but there is a variation between the groups" respondent in their opinion towards the presence or absence of controlling mechanism for proper utilization of available resources in their school.

The chi-square test result obtained ($\chi^2 = 2.65$ and $p\text{-value}=0.619$) indicated that there was no statistically a significant difference between the groups respondents at 0.05 significance level. This shows that the respondents have the same opinion about the presence or absence of controlling mechanism for proper utilization of available materials in their school.

The respondents were also requested about by whom the major parts of control activities were performed at different levels. To this item, the highest number 52(40.3%) of the respondents reported that the major parts of control activities at different level of their school was performed by head of the respective system whereas 35 (27.1%) of the groups respondent answered as general service of their school performed the control activities. Moreover, 42 (29.6%) of the total respondents confirmed as the storekeeper of their school performed major parts of control activities of material resources. From the above responses

one can conclude as the control activities were performed by the head of the respective system, storekeeper and general services consecutively. Majority of the groups of respondents had similar opinion about the performer of the major parts of the control activities of materials in their school.

The chi-square test was employed and the result obtained ($\chi^2 = 2.32$ and $p\text{-value} = 0.677$) indicated that there was no significant difference between the groups respondents at 0.05 significance level. The respondents had similar opinion about the performer of control activities.

The respondents were requested to explain the interval in which inventory were carried out in their school. In this regard, with a total of 18(14%) of the respondents replied that inventory carried out in their school twice a year. Whereas the majority 62 (48.2%) of the respondents answered that their school carried out inventories only when needed. On the other hand, 15 (11.5 %) of the groups respondents responded that inventories carried out once a year in their school while 24 (18.6%) of the groups respondents answered as their school carried out inventories once in a quarter. The least number of respondents 10(7.8%) responded that inventories carried out in their school twice a quarter. Based on the result of analysis one can conclude that inventories carried out only when needed, once in a quarter, twice a year and once a year in secondary schools.

To evaluate the difference a chi-square test was employed and ($\chi^2 = 10.89$ and $p\text{-value} = 0.208$) was found at $\alpha = 0.05$ significance level. Therefore, it is possible to say that the activities of inventory in secondary schools are not carried out through planned way.

Besides, the responses obtained from open-ended items and most of interviewees indicated that inventories in schools carried out when principals transferred from one school to another. This also reveals that it was not carried out in planned manner

4.2.8. Disposing Unused Materials in the School

In the review literature part of this study, it was stated that disposal of obsolete and surplus materials is one of the challenging problems in school materials management. In connection to disposing, questions were posed to respondents and discussed as follows:

Table 10:1 Issues Related to Disposal of Material Resources

N	Question	Respondents	Response						
			Yes	No	I don't know	Total	χ^2	P-v	
1	In your school are there idle or under used materials ?	Teachers	N	31	6	10	47	4.68	0.892
			%	66	12.8	21.3	100		
		School leaders	N	19	10	8	37		
			%	51.4	27	21.6	100		
		Student council	N	30	5	10	45		
			%	66.7	11.1	22.2	100		

In item 1 of table 10, respondents were asked whether idle or under used materials are in their school or not. As it was indicated in the table, out of the groups respondents, the majority 80 (62%) responded positively whereas the least number 21 (16.3%) of the groups respondents replied negatively. The rest 28(21.7%) of the total respondents confirmed as they have not seen whether it was there or not. There is no variation of opinion between groups respondents regarding the presence or absence of idle or under used materials. Based on the result of the analysis, one can conclude that there was idle or under used materials in their school. The chi-square test was employed ($\chi^2 = 4.68$ and p-value of 0.321) shows there was no statistically a significant differences between the groups respondents.

As the researcher conducted observation and document analysis unused materials such as type writer, computers, text books, desks, chalk board and are mostly accumulated in the storeroom, pedagogical center, library, and sport departments. Besides, it is shown that in all schools obsolete, surplus and scrap materials are found. Especially obsolete materials are found in a large quantity than others in some of the sample schools of the study. This affected the proper functioning of the stores. Therefore, because of not disposing surplus, obsolete and scrap materials in time the store is not functioning as it is to be.

The responses obtained from open ended question item and interviewees on the reason why unused materials are not disposed in time, the respondents were suggested that: lack of knowledge and skills how to dispose, fear to take a risk about materials disposed, the non-existence of a clear guideline on disposing of unused educational materials except that of text books. Therefore, it is possible to say that the disposing activity of unused educational materials is not carried out in time in secondary schools.

Table 10:2 Issues Related to Disposal of Material Resou

N	Question	Responden ts	Response						
			certainly	Not actually	I don't know	total	χ^2	P-v	
2	Is there any guideline to dispose unused materials in your school ?	Teache rs	N	16	13	18	47	1.11	0.892
			%	34	27.7	38.3	100		
		School leaders	N	10	12	15	37		
			%	27	32.4	40.5	100		
		Student council	N	17	12	16	45		
			%	37.8	26.6	35.6	100		

In item 2 of the same table, respondents requested to give their opinion regarding the presence or absence of guideline to dispose unused materials in their schools. As a result, the highest number of the respondents 49 (38%) responded as they do not know whether there is a guideline for disposing unused materials in their school or not. Whereas 43 (33.3%) replied that there was certainly a guideline for disposing unused materials while a total of 37 (28.7%) confirmed that guideline for disposing of unused materials is not actually present. There is no difference between the groups' respondents in their opinion towards the presence or absence of disposing guideline.

The chi-square test was employed and the result obtained ($\chi^2 = 1.11$ and p-value of 0.892) indicated that there is no a significant difference among the groups respondents. As the researcher conduct observation and document analysis there is no guideline to dispose unused materials except for the unused text books.

Table 10:3 Issues Related to Disposal of Material Resource

N	Question	Respondents	Response							χ^2	P-v
			Very high	High	Medium	Low	Very low	Total			
3	If your response to question number 2 is certainly to what is the guideline effective ?	Teachers	N 1	4	8	2	1	16	3.51	0.8	
			% 6.3	25	50	12.5	6.3	100			
		School leaders	N 2	1	6	1	-	10			
			% 20	10	60	10	-	100			
		Student council	N 1	5	8	2	1	17			
			% 5.9	29.4	47	11	5.9	100			
4	Practice in disposal of unused materials	Teachers	N 3	4	12	22	6	47			
			% 6.44	8.5	22.5	46.8	12.7	100			
		School leaders	N 1	5	11	15	5	37			
			% 2.7	13.5	29.7	40.5	13.5	100			
		Student council	N 4	5	11	20	5	45			
			% 8.9	11.1	24.4	44.4	11.1	100			

In item 3 of the same table, the respondents were asked the extent to which the guideline was effective. Accordingly, the majority of the respondents with a total of 22 (51.2%) replied as the extent of effectiveness of the guideline was average. On the other hand 14 (32.6%) replied as the extent was high and very high. Whereas 3 reported low and very low the extent of effectiveness of the disposing guideline.

The chi-square test was employed and the result obtained ($\chi^2 = 3.51$ and p-value of 0.898) indicated that there was no a significant difference among the groups respondents in their opinion towards the effectiveness of the disposing guideline. The response of the respondents indicated that the extent of effectiveness of the guideline was average.

As the researcher made document analysis the guideline to dispose unused text books allows only the disposal of unused text books through selling to others by purposively organized committee from Woreda Education Office and WFEDO and not incorporated other materials to be disposed.

In item 4 of table 10, respondents requested were requested the responsible body to dispose unused materials in their schools. To this item, 44 (34.1%) of the respondents reported as school principal was responsible to disposal of unused materials whereas 40 (31%) of the total respondents responded as storekeeper was responsible to dispose unused materials in their schools. The highest number of the groups respondents 45 (34.9%) replied as purposely organized committee was responsible to dispose unused materials in their school. As it was shown in the analysis, the respondents had similar opinion about the responsible body to dispose unused materials. In majority purposely organized committee disposed obsolete, surplus and scrap materials in their school while school principal and storekeeper disposed the materials in others school. The chi-square test was employed and the result obtained ($\chi^2 = 1.20$ and p-value of 0.880) indicated that there was no statistically a significant difference between the groups respondents.

As the researcher conducted an interview with principals and woreda education office project experts about the responsible body to dispose unused materials, they responded that purposely organized committees from woreda education office in collaboration with woreda finance and economic development office disposed unused text books through selling to others based on the guideline on hand. On the contrary, the interviewee responded as they did not dispose other unused materials due to lack of a clear guideline for disposal. The respondents were asked to rate the effectiveness of their school in respect to disposal of unused materials. To this item, respondents who covered the highest number rated as low. From all respondents, 57 (44.2%) rated low, 34(26.4%) confirmed average, 14 (10.9%) rated high, 16 (12.4%) reported very low. The remaining, 8(6.2%) replied as the rate of performance of disposal of materials in their school was very high. This indicated that majority of the respondents had similar outlook about performance of disposal of unused materials. The results showed that disposal of unused materials in secondary schools are not well done.

The chi-square test was employed and the result obtained ($\chi^2 = 2.60$ and p-value of 0.972) indicated that there was no statistically a significant difference among the groups respondents at 0.05 significance level.

As the researcher conducted observation in sample secondary schools, unused materials such as obsolete, surplus and scrap are densely presented more off in stores and pedagogical centers even these materials were not arranged solely and not counted. They placed

haphazardly without proper recording and setting. This indicated that performance of disposal of materials in secondary school was poor.

4.3. Participation of Teachers and Non-teaching Staff in Material Resource

Management

As discussed in chapter two of this paper, the success of school based management requires the support of the various school-level stakeholders, particularly teachers and non-teaching staff. Accordingly, questions with reference to the involvement of teachers and non-teaching staff in the management of material resources were posed to respondents. The responses obtained are presented here under in table 11.

Table 11: Items Related to Participation of Teachers and Non-teaching Staff in Materials Management

No	item	homeroom		school		student		total		x ²	p-value
		teachers		ADs		councils					
		N	%	N	%	N	%	N	%		
1. In your school do teachers and non-teaching staff participate in the management of material resources ?											
	Yes	27	57.4	22	59.5	29	64.4	78	60.5		
	No	19	40.4	13	35.1	15	33.3	47	36.4	1.43	0.840
	I do not know	1	2.1	2	5.4	1	2.2	4	3.1		
	Total	46	100	37	100	45	100	129	100		
2. If your response to question number 1 yes to what extent do they participate ?											
	Very high	1	3.7	3	13.6	3	10.3	7	9		
—	High	8	29.6	4	18.1	9	31	21	26.9		
	Average	13	48.1	13	59	12	41.4	38	48.7	4.25	0.834
	Low	4	14.8	2	9	4	13.8	10	12.8		

Very low	1	3.7	-	-	1	3	2	2.6		
Total	27	100	22	100	29	100	78	100		
<hr/>										
3.If your response to question number 1 is "no" what is your reason ?										
Lack of awareness	3	15.8	2	15.3	4	26.6	9	19.1		
They have no decision making roles	3	15.8	4	30.8	3	20	10	21.3	2.56	0.863
They have no administrative authority	5	26.3	2	15.3	4	26.6	11	23.4		
School principals do not want them to participate	8	42	5	38.4	4	26.6	17	36.2		
total	19	100	13	100	15	100	47	100		
<hr/>										

As it is depicted in table 11, item 1, the respondents were requested to give their opinion on whether teachers and non-teaching staff participate in the management of material resources in their respective schools. In this regard, the majority, 27 (57.4%) teachers, 22(59.5%) school administration, and 29(64.4%) student council replied that teachers and non-teaching staff take part in the management of material resources. While 19 (40.4%) teachers, 13 (35.1) school administration, 15 (33.3%) student council responded negatively. The least number of the total respondents 4 (3.1%) reported as they do not know whether teaching and non-teaching staff participate in materials management or not. From these responses of the respondents, it is logical to say that the material resource management functions in secondary schools lacked full contribution of teachers and non-teaching staff.

The chi-square test was carried out and the result obtained ($\chi^2 = 1.43$ and p-value of 0.840) pointed out that there was no significant difference between the responses of the groups of respondents at 0.05 significant level with respect to the participation of teachers and non-teaching staff in the material resource management in their school. It asserted that most of the respondents had relatively equal perspective regarding the involvement of the teachers and non-teaching staff in the management of material resources. Concerning the involvement of stakeholders in education, FDRE (1994) stated through the policy document

that clear guidelines are issued to ensure participatory and proper professional relations for all concerned bodies involved in the educational activities.

Patrinou. et al. (2009) reported that the material resource management functions performed in the school with the great support of the teachers, non-teaching staff, parent-teachers association, and the community leaders to accomplish the intended educational objectives. But this has not been observed in majority of the schools.

In item 2 of the same table, the respondents were requested to indicate that the extent of their participation. Regarding this, 13 (48.3%), 13 (59%), and 12 (41.4%) teachers school administrators and student council respectively reported that the degree of their involvement was average. Besides, 28 (35.9%) of the total respondents rated the extent of participation high and very high. The remaining 5(18.5%), two (9%), 5(16.8%) of the teachers, non-teaching staff and student council respectively rated the extent of participation low and very low. Accordingly, responses of the respondents revealed that the involvement of teachers and non-teaching staff in the material resource management in secondary school was not high. It was answered average by majority of the respondents.

The chi-square test result ($\chi^2=4.25$ and p-value of 0.834) shows that there was no significant difference between the responses of the groups of respondents on the degree of the participation of teachers and non-teaching staff in the material resource management in their school at 0.05 significant levels which indicated the similarity of suggestion between the groups of respondents. Moreover, the data collected through interview also shown that, the involvement of the teachers and non-teaching staff was moderate regarding the management of material resources in the schools.

According to table 11, item 3, the respondents were asked to point out the reasons why they reported as „no“. In this respect, 17 (36.2%) of the total respondents suggested that the refusal of school principals to participate the teachers and the non-teaching staff in the managerial activity of material resources. On the other hand, a total of 10 (21.3%) replied that teachers and non-teaching staff have no decision making roles whereas 11(23.4%) of the total respondents confirmed that they have no administrative authority. The least number 9 (19.1%) of the groups respondents reported as lack of awareness hinders teachers and non-teaching staff not to participate in materials management of their school. Accordingly, based on the responses of the respondents, the school principals“ denial for the involvement of the teachers and the non-teaching staff in the managerial activity of material resources, lack of decision making roles, lack of administrative authority and lack of awareness of the teachers

and the non-teaching staff with respect to the material resource management functions, were consecutively the reasons that lowered their participation.

The chi-square test was employed and the result obtained ($\chi^2 = 2.56$ and p-value of 0.863) also shows that there was no significant difference between the responses of the groups of respondents at 0.05 significant level regarding the mentioned reasons for the low participation. This indicated that the majority of the respondents had almost equal understanding on the factors that influenced their participation in the management of material resources. Respondents were also asked to specify more reasons through open-ended question in the questionnaire if they responded as „no“. In this regard, the respondents confirmed that the overall school situation also affected the participation of the teachers and the non-teaching staff in the material resources management activities in their school. This is may be shown by whether the school administrators are practicing the participative form of management in general and material resource management in particular.

5. SUMMARY, FINDING CONCLUSION AND RECOMMENDATION

In this chapter the summary of the major findings of the study, conclusions and recommendations have been presented.

5.1. Summary

The purpose of this study was to investigate the current practices and problems of material resource management in the secondary schools of East Hararghe Zone and to forward suggestions for solutions and provide recommendations. In that light, the following basic questions were answered in the course of the study.

- ⇒ What is the current practice of material resources management in the selected secondary schools of East Hararghe Zone?
- ⇒ To what extent stakeholders participate in the material resource management
- ⇒ What are the means used in assessing needs for material resources in the secondary schools?
- ⇒ What are the major factors that hinder the management of material resources in the Secondary schools of East Hararghe Zone?

The study was conducted in 9 selected secondary schools of East Hararghe Zone These are Gorogutu, Dadar, Kersa, Babile, Meta Haramaya, Kombolcha, Melka Belo, and Aweda .

The schools were selected using simple random sampling technique

Accordingly descriptive survey study method was employed in this study and the related literature was reviewed. Both quantitative and qualitative data were gathered through questionnaire, interview, and documents analysis. A total of 138 questionnaires were distributed to teachers, school administrators , and student council. The respondents who completed the questionnaires were 47 teachers, 37 school administrators , and 45 student council. Moreover, nine woreda education office project expert or material resource supply process owners and 9 principals, of which 9 supervisors were interviewed. The data obtained were analyzed using frequency, percentage and chi-square test.

5.2 Finding

Based on the analysis of the data, the following findings were obtained from the study.

- **Current practice of material resources management in the selected secondary schools of East Hararghe Zone.**

In relation to planning for material resources, the respondents replied that their school prepared a plan for the requirement of material resources by aggregating with the overall annual plan of the school rather prepared it solely. As the highest number of the groups

of respondents answered the responsibility of planning of material resources lays with school principals.

Concerning need assessment, the groups of respondents replied that the schools conducted need assessment before materials were purchased.

In relation to the appropriateness of the purchases made at the school to the needs of the teaching learning process, most of the respondents replied as it was not appropriate. Most of the respondents replied that due to inappropriate purchasing; the teaching learning process was negatively affected at very high rate.

Concerning the controlling mechanism for proper utilization of available material resources, the majority responded that there was a controlling mechanism for proper utilization of available resources in their schools once a year

➤ **Extent of teaching and non-teaching staff participation in the material resource management.**

Concerning to the extent to which the teachers and non-teaching staff involved in material resources management, the majority of the respondents reported as average. Concerning the extent of the involvement of teachers and non-teaching staff in needs assessment for material resources to be purchased, the respondents reported as average. Moreover, the data collected from the interviewees confirmed that school principals determine the material requirements for the school without assessing the needs of the users of the materials.

With regard to the participation of concerned staff in planning for material resources, the respondents replied that their involvement was not so much. Similarly, the respondents revealed that the participation of teachers and non-teaching staff in realizing the proper utilization of material resources was less.

➤ **The Extent of guidelines availability and effectively functional for material resource management in the secondary schools.**

With respect to the availability of purchasing guideline for material resources, the majority of the groups of respondents were responded that the guideline was available. On the other hand, most of the interviewees and information obtained through documents confirmed that there was no purchasing guideline in the schools because it was found in woreda finance and economic development office.

The highest number of respondents confirmed as they did not know the availability of a guideline for disposing unused materials in their school. As the researcher conduct observation and document analysis there was no guideline to dispose unused materials except for the unused text books.

➤ **The means used in assessing needs for material resources in the secondary schools.**

The highest number of respondents replied that their school was participatory at average level in assessing the need of materials. The identified needs of materials were not approved by the individual who had the same position .It was approved differently in secondary schools.

➤ **The major factors that hinder the management of material resources in the Secondary school**

Regarding the factors that hinders materials management in secondary school most of the respondents reported different constraints. These are; the absence of proper guideline for the appropriate purchasing and utilization of materials, the absence of the participation of stakeholders in the management of material resources, lack of proper stores in secondary schools, lack of specific responsible body for material resource management, lack of appropriate manpower for respective functions of material resource management and absence of training in relation to the materials management functions for principals and non- teaching staff.

5.3 Conclusions

Based on the summary and major findings, the following conclusions were drawn.

- ⇒ Need assessment was poorly exercised and materials organization and distribution were dominant activities performed among the variables. This could be as a result of lack of adequate knowledge and skill in planning. Hence, it can be said that materials planning is haphazard and in that it is prepared without gathering and analyzing data regarding the present status of the already existing materials and equipment.
- ⇒ The extent to which the teachers and non-teaching staff involved in material resources management was average. The involvement of teachers and non-teaching staff in the activity of needs assessment for material resources to be purchased was average. It was the principals of secondary schools who decide the needs for material resource requirement without assessing the needs of the users. Their participation was found average in need assessment, planning, purchasing and utilization of material resources in secondary schools. Whereas, their participation in handling and storage, maintenance, and disposal of unused materials was low. This was mainly because there was absence of encouraging teachers and non-teaching staff by school leaders and lack of awareness to participate actively in the functions of material resources management.

- ⇒ The practice of educational material management and utilization was found to be poor in terms of involving stakeholders wise and efficient use of material management functions (purchasing, allocation distribution etc.)
- ⇒ The factors that hinders materials management in secondary school were the absence of proper guideline for the appropriate purchasing and utilization of materials, the absence of the participation of stakeholders in the management of material resources, lack of proper stores in secondary schools, lack of specific responsible body for material resource management and lack of appropriate manpower for respective functions of material resource management. These factors hamper materials management differently in different schools. Besides, lack of training for principals and non-teaching staff in relation to materials management functions which in turn might impede the accomplishment of educational goals in general and the quality of education in particular also observed as another hindering factor.

5.4. Recommendations

In light of the major findings and conclusions of the study, the following recommendations were provided in order to overcome factors affecting the effectiveness of material resource management functions.

- ⇒ The schools principals should work together with teachers, department heads, non-teaching staff and PTA in the process of need assessment of materials to be purchased .
- ⇒ Material resources plan should be prepared with the active involvement of teachers, non-teaching staff, PTA and the community. This can help the performers to give full attention and follow up its implementation rather forget it at all. Besides, the effectiveness of planning of material resources should be improved to high or above to realize educational objectives.
- ⇒ Secondary schools should be given clear guideline that entails duties and responsibilities of practitioners of the purchase activities by WEO, ZEO, REO and recruiting qualified manpower for the position. Furthermore, the school leaders should ensure the involvement of stakeholders in the preparation of specification for material resources.
- ⇒ The school leaders and the community should strongly assess means of getting ample budget.
- ⇒ 5. Secondary schools should prepare appropriate and enough storage space, Woreda education office and secondary schools should plan and conduct training

for storekeepers, prepare schedule for experience sharing and learn good lesson from best practices. The school administration should closely work hard together with the school communities to fulfill materials storage and handling equipment

- ⇒ Secondary schools should plan for regular inventories of material resources to control and utilize properly as it is to be
- ⇒ Schools should prepare rules and regulation that assist to dispose the mentioned materials. Besides, the schools should dispose obsolete, surplus and scrap materials in time to use store more materials without damage. The responsible body to dispose unused materials should be clearly
- ⇒ Principals should exploit the experiences and skills of the stakeholders especially that of teachers and non-teaching staff to improve the effectiveness of their schools by creating conducive environment for the participatory form of management in general and material resource management functions in particular. Moreover, schools should work to create awareness on stakeholders regarding the management functions of material resources.
- ⇒ The school principals should scan the school environment to identify the needs of material resources by involving teachers, department heads, and non-teaching staff. This way, it is possible to assure the appropriateness of materials with the requirements of teaching-learning process.
- ⇒ Secondary schools should improve the performance of the maintenance of material resources, the practicality of disposal of unused materials, and a guideline of materials management and its utilization should be existed
- ⇒ Education officials should prepare and disseminate proper guideline for the appropriate purchasing and utilization of materials, the school leaders should ensure presence of the participation of stakeholders in the management of material resources, presence of proper stores in secondary schools with qualified personnel in stores or related activities.
- ⇒ It is very important to give principals and non-teaching staff on-job-training to empower them with knowledge and basic skills regarding the management functions of material resource

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COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCE

Questionnaires To Be Filled by Teacher ,Supervisors ,and Principals

Dear respondents, I am currently conducting a study on practice and challenges of educational materials resource management in secondary schools of East Hararghe Zone.

The purpose of this questionnaire is to collect information and opinions from PTAs, teachers, principals, supervisors, and students regarding educational material resource management. The information and opinions gathered from the respondents will be used only to identify the existing problems and suggest recommendations for future progresses of material resource management practices in the schools. The information you give will be strictly kept confidential. Thus, you are kindly requested to provide your genuine opinions and suggestions.

Thank you in advance for your cooperation!

General Instruction

1. Do not write your name.
2. Put a “√” mark in the box for responses that you think are appropriate for close-ended items.
3. Write your responses on the space provided for open-ended questions. Questionnaire

A. General Information

1. The name of your School _____
2. The location of your School (where you work) Region _____
Zone _____ Woreda _____

B. Personal Data

3. Age (in years) 21-25 26-30 31- 35 36-40 41- 45 46 or above

4. Sex: M F
5. Years of Work Experiences 1-5 6-10 11-15 16-20 21-25 26 or above
6. Current Educational Qualification M.A/MSc BA/BSc College Diploma others (please specify if others) _____.
7. The number of periods you are teaching weekly (load of periods per week for teachers) 15-20 21-25 26-30 31 or above
8. Your subject of teaching _____

Part I: Need Assessment for Material Resources

1. In your school, do you conduct needs assessment for material resources to be purchased?
A. yes B. no C. I do not know
2. If your response to question number 1 is “yes”, to what extent are teaching and non-teaching- staff involved?
A. Very high B. High C. average D. Low E. Very low
3. Do you consider that the purchases performed by your school are appropriate to the needs of teaching-learning process?
A. yes B. no C. I do not know
4. If your response to question number 3 is “yes”, to what extent is the teaching-learning process positively affected?
A. very high B. high C. average D. low E. very low
5. How participatory is your school in materials need assessment?
A. very high B. high C. average D. low E. very low

PART II: Planning of Material Resources

1. Does your school plan about Material Resources?
A. Yes B. No C. I don't know

If your answer to question item 9 is “yes”, please respond to questions 9-11.

No	item	V.H	High	av er a	L	Very l
1	To what extent is the planning of material resources effective?					
2	To what extent do teachers and administrative personnel take part in the process of Planning for material resources?					
3	The extent to which the current planning process for material resources satisfying the demands of different users					
5	The similarity between what is planned and purchased items					

PART III . Purchasing of Educational Materials

1. In your school, is there any purchasing guideline for proper purchasing of material resources? A. yes B. no C. I do not know

2. If your response to question number 1 is “yes”, to what extent do you think is the existing purchasing guideline applicable?

A. very high B. high C. average D. low E. very low

3 . In your school, is material resources purchased on time?

A. yes B. no C. I do not know

4. Does your schools prepare specification for material resources to be purchased?

A. yes B. no C. I do not know

5. If your response for question number 7 is “yes”, who is the responsible body for the activity? (You can select more than one alternative)

A. principals B. teachers C. PTA D. administrative and finance personnel E. Woreda finance and economic development office If others, specify _____

PART IV: Proper Utilization of Material Resources

1. Does your school have any guideline for proper utilization of material resources?

- A. Yes B. No C. I don't know

If your answer to question item 1 is “yes” please respond to question 2

No	Item	Very high	high	average	Low	Very low
2	If there is a guideline in your school To what extent is the guideline effective?					
3	. To what extent do users accountable for misuse (wastage) of material resources in your school?					
4	To what extent are teachers and non-teaching staff involved in realizing the proper utilization of material resources?					
5	How is the adequacy level of material resources in your school?					

PART V: Handling and Storage of Material Resources

1. In your school is there any storage facility for materials?

- A. Yes B. No C. Difficult to decide

If your response to the above question is “yes” how do you rate classification and codification practice of materials in store?

- A. very high B. high C. medium D. low E. very low

3. How is the warehousing/storage, of materials properly arranged and recorded?

- A. yes B. no C. I do not mind

4. Who participate in storing activities? (You can choose more than one alternatives)

- A. storekeeper only B. Teaching and non-teaching staff C. Principals and PTAs
 D. administrative and finance worker E. If others please specify_____

5. Practice of handling and storage of material resource

- A. very high B. high C. average D. low E. very low

PART VI. Maintenance of Educational Materials

1. Are the available material resources of your school maintained timely

A. yes B. no C. I do not know

2. If your response for question number 2 is “yes”, to what extent is the maintenance activity effectively performed? A. very high B. high C. average D. low E. very low

3. What is the efficiency of your school regarding the maintenance of material resources? A. very high B. High C. average D. low E. very low

4. The extent of the participation of teachers and non-teaching staff in the activity of maintenance of material resources?

A. very high B. high C. average D. low E. very low

5. Practice in maintenance of materials

A. very high B. high C. average D. low E. very low

PART VII. Inventory Control of Educational Materials

1. Is there any controlling mechanism for proper utilization of available resources in your school? A. Yes B. No C. I don't know

2. By whom do you think that the major parts of control activities were performed at different level?

A. Head of the respective system B. General Service C. Store keeper D.

If others please specify _____

3. How often is inventory takes place in your school?

A. Twice a year B. Once a year C. Once in a quarter D. Twice a quarter E. only when needed

PART VIII: Disposal of material resources

1. In your school are there idle or under used materials?

A. Yes B. No C. I have not seen

2. Is there any guideline to dispose unused materials in your school?

A. Certainly B. Not actually C. I don't know

3. If your answer to question item 51 is “certainly” to what extent is the guideline effective?

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

4. Who is responsible to disposal of unused material resources?

A. school principal B. Storekeeper C. Purposely organized committee
 D .if others please spesify

5. Practice in disposal of unused materials

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

Part IX: Participation of Teachers and Non-Teaching Staff in Material Resource Management

1. In your school, do teachers and non-teaching staff participate in the management of material resources?

A. yes B. no C. I do not know

2. If your response to question number 1 is “yes”, to what extent do they participate?

A. very high B. high C. average D. low E. very low

3. If your response to question 1 is “no”, what are the reasons?

A. lack of awareness B. they have no decision making roles C. they have no
 administrative authority D. school principals do not want them to participate
 E. Other, specify

4. Which factors do you think hinders the management of materials resources in your school? (you can choose more than one alternatives)

A. lack of specific responsible body for materials resource management

B. The absence of proper guideline for the appropriate purchasing and utilization of material

C. lack of appropriate manpower for respective functions of materials resource management

D. lack of proper stores in secondary schools

E. the absence of the participation of stakeholders in the management of material resources

F. others (please specify) _____

Part X: General Comments

1. Are there formally established rules and regulations regarding materials resources management? How effective is the existing policy guideline to run the system? Please, specify _____

2. Did you get any training concerning to the material resource management? If you got training specify its sort. (Seminar, workshop, conference or orientation)

3. What are the major problems facing your school regarding the Management of material resources?

4. What possible solutions could you suggest to alleviate the overall problems of Material resource management?

II. Interview

HARAMAYA UNIVERSITY

POST GRADUATE PROGRAM DIROCTORATE

COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCES

The aim of this interview question is to collect information and opinions about practice and challenges of material resources management in secondary schools of East Hararghe Zone. The information gathered will be used only for the study purpose. Hence, you are kindly requested to provide the necessary information and comments.

Interview Questions

Part I General Information

1. Zone _____
2. Woreda/Administrative Town _____
3. Sex of the interviewee _____
4. Age range _____
5. Education level of the interviewee _____
6. Field of study _____
7. Current position (Post) _____
8. Total years of work experience _____
9. Years of work experience in this school _____

Part II Question Items

1. Is there any activity of needs assessment in your school before purchasing process is carried out? How do you conduct it?

2. Is there the activity of planning for material resources? How do you plan for material resources in your school?
3. Is there any guideline for purchasing of material resource and to what extent does it applicable?
4. What are the problems that affect the proper utilization of material resources?
5. How does your school carry out the maintenance of material resources and what are the problems regarding to the activity?
6. To what extent do teachers and non-teaching staff participate in the management of material resource?
7. Are there guidelines for material resource management? How does the school apply them?
8. What are the major factors affecting the management of material resources?
9. What do you suggest to improve the functions of material resource management in your school?
10. Any other suggestion or idea about the material resource management in your school?