



**COLLEGE OF EDUCATION AND BEHAVIOURAL STUDIES  
DEPARTMENT OF CURRICULUM AND INSTRUCTION**

**AN ASSESSMENT OF LEVEL ONE ALTERNATIVE BASIC  
EDUCATION TEXTBOOKS OF PASTORALIST AND SEMI-  
PASTORALIST AREAS OF SOMALI REGION**

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

**By**

**Mohamoud Mohammed Abdillahi**

**June, 2019**

**Addis Ababa, Ethiopia**

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## **Declaration**

I, the undersigned, declare that this work entitled with “**An Assessment of Level One Alternative Basic Education Textbooks of Pastoralist And Semi-pastoralist Areas of Somali Region**” is the outcome of my own effort and that all sources of materials used for the study have been duly acknowledged. I have produced it independently except for the guidance and suggestion of the research advisor. This study has not been conducted in the area (region) that I have conducted before me.

By: Mohamoud Mohammed Abdillahi

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## **Confirmation**

This thesis has been submitted for examination with my approval as a university advisor.

Messeret Assefa (PhD and Associate Professor)

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**An Assessment of Level One Alternative Basic Education Textbooks of  
Pastoralist And Semi-pastoralist Areas of Somali Region**

**By  
Mohamoud Mohammed Abdillahi**

Approved by board of Examiners:

Chairperson of the Department

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June, 2019

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## **List of Acronyms**

ABE	=	Alternative Basic Education
ABECs	=	Alternative Basic Education Centers
CTE	=	College of Teachers' Education
EFA	=	Education For All
ASQ	=	American Society for Quality
EMPDA	=	Educational Materials Production and Distribution Agency
ESDP	=	Educational Sector Development Program
FAO	=	Food and Agricultural Organization
IICBA	=	International Institute of Capacity Building for Africa
MoE	=	Ministry of Education
NGOs	=	Non Governmental Organizations
OECD	=	Organization for Economic Co-operation and Development
PADS	=	Pastoral Area Development Study
PCAE	=	Pastoralist Concern Association of Ethiopia
PFE	=	Pastoralist Forum of Ethiopia
UNESCO	=	United Nations Education, Science and Culture Organization
UNICEF	=	United Nations International Children's Educational Fund
WCEFA	=	World Conference on Education for All
WNN	=	Women News Network
WDR	=	World Development Report

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## **ABSTRACT**

*The purpose of this study was to assess the extent of the appropriateness of the first level Af-somali, English, Mathematics, and Environmental Science textbooks prepared for students of ABE centers at pastoralist and semi-pastoralist areas of Somali Regional State. To conduct the study, content analysis was used as a method. Interviews for Regional Education Curriculum Department head and curriculum experts of the department who participated in the preparation of the textbooks were applied as a supplementing procedure. The appropriateness of the textbooks' scope and sequence, layout, objective-content association, the conditions of illustrations and gender issue were coded and analyzed. The findings of this study showed that all contents are in harmony with the objectives set in the respective syllabi. The scope and sequence of all the textbooks need to be aligned with the level of ABE students. The illustrations are also in harmony with the contents although some of them lack clarity. The whole textbooks are prepared on the basis of self directing modes of activities. However, currently it is found that the typographic layouts and page setups of these textbooks show insignificant variation with standards set by EMPDA. Significant encouraging attempts and efforts have been shown to maintain gender balance, but it is found that this balance is not maintained perfectly throughout the textbooks. The setup of teams whose members include curriculum experts, subject experts, practicing teachers, graphic designers and the like for the purpose of curriculum materials development; editing manuscripts by separate professionals other than the textbook writers as it can positively contribute to the quality of the textbooks; revision of the textbooks periodically based on further and comprehensive study including the other aspects of the textbooks quality, paying due attention for the issues related with gender balance; the issues of setting standards and the formulation of textbook policy by concentrating on textbook writing, textbooks quality evaluations and approval, research on textbooks, copyright and similar matters either at federal or regional level; allowing the publishers' participation in line with the principles of free market economy to accomplish the task of preparing and publishing textbooks are finally recommended based on the findings and conclusion of the study.*

# **CHAPTER ONE**

## **1. INTRODUCTION**

This chapter deals with background of the study, statement of the problem, objectives of the study, significance of the study, delimitation of the study, limitation of the study, definition of the key terms, organization of the study and summary of the chapter.

### **1.1. Background of the Study**

Education has become prominent thing nowadays as it involves most people to take part in this matter. In addition to this it cannot be separated from human's life. Both males and females need to be educated. Education also plays an important role in the development of a country. If a country does not have proper education, it may be left behind by other countries which support education. There are many factors that affect the education system in general and its curriculum in particular whereas culture, technology, and economical matters give much impact to the education system of a country. The regulation made by the government affects how the education system works in a country.

The education system in Ethiopia still uses the one-way communication. The teachers stand in front of in the class and explain all the materials, while the students just sit down on their seats and listen to the teachers. One-way communication has negative effects on the students. They become unconfident to share their opinions or even ask a question. The government should improve this education to a better one. Two-way communication is considered as a better way in teaching method. The development of technology contributes much impact on the education. It can be very useful for many people to get the education because education is essential in human's life. As time goes by, system of education changes dynamically following the needs of human beings.

In other words, education is a basic human right, and it is central to unlocking human capabilities. It has also tremendous instrumental value which raises human capital, productivity, incomes, employability, and economic growth although its benefits go far beyond these monetary gains; for instance, education makes people healthier and gives them more control over their lives. In addition to this it generates trust, boosts social capital, and creates institutions that promote inclusion and shared prosperity (Larreguy, Horacio and John Marshall. 2017).

There are many factors that affect the education system. Culture, technology, and economical matters give much impact to the education system of a country. The regulation made by the government also affects how the education system works in a country. Brown and White (2013) even stressed the need for students since early childhood to become familiar with alternative practices in other countries. As time goes by, education system changes dynamically with the intention of improving it.

As stated by Hinzen (2000), basic education is the base for learning to read, to write and to do basic arithmetic in the beginning of children's life. Children acquire life skills that comprise the base of knowledge and understanding about the world that enables the people to reason out, to solve the matters and to decide important issues facing their societies. An alternative basic education is relatively new approach to formal basic education. To that end, all regions in Ethiopia, have been implementing the program to achieve the Universal Primary Education.

The Ministry of Education (MoE) has made strong efforts to provide access to primary education for out-of-school children through school construction, the provision of alternative education modalities (ABE centers, boarding schools, mobile schools) and through the special support program to the four emerging regions. The MoE designed the Alternative Basic Education program in 2006 to improve the access of education for children who are unable to attend the four year formal lower primary education. The national ABE strategy provides guidance for the establishment of new Alternative Basic Education Centers (ABECs) and in parallel with the extension and transformation of ABECs into formal primary schools are primarily intended to address the diversity of needs and contexts when providing access to education, particularly to out-of-school children. ABE has contributed considerably to the improvement of enrollment

rates for disadvantaged and previously under-served ethnic groups as well. Since the national ABE strategy was founded in 2006, new ABECs have been established and existing ABECs will be upgraded or turned into regular schools (MoE 2015). By 2014 – 2015, the number of ABCs in Ethiopia reached 3,932 (MoE 2016).

Despite the remarkable expansion of primary education and tremendous increase in enrolment for the last two decades, a very large number of school-aged children in Ethiopia continue to be out of school in pastoralist regions (MoE, 2010). According to Pact Ethiopia (2008, p.7), education enrolment of Ethiopian pastoralists is among the lowest and “requires direct, specific, and targeted attention towards enabling pastoral children to access to quality education” if the agenda of EFA is to be achieved even years after the deadline.

Pastoralism is a livelihood system based on free-grazing animals that is used by communities in marginal areas. The land may be marginal for various reasons, including poor water supply or soil quality, extreme temperatures, steep slopes and remoteness. Pastoralism enables communities to manage their resources in a sustainable, independent and flexible way. It is marked by rights to common resources, customary values and ecosystem services.

Mobility is a key common feature of pastoralism. Indeed, it is vital for the sustainable use of marginal rangelands. Rather than bringing resources to the animals (as in other types of livestock-raising), pastoralism moves the animals to whatever resources are available. Such mobility enables pastoralists to benefit from seasonal pastures, and provides access to water, salt patches (critical for animal health) and other resources and services. It also enables them to obtain other types of food and to control diseases.

Pastoralists live in areas where extensive livestock farming is the most appropriate use. The potential for crop cultivation is marginal because of low, variable and unpredictable rainfall, poor soil quality, rocky or steep terrain, high altitude, or extreme temperatures (tundra, alpine areas, steppes, semi-desert and deserts). Pastoralists have developed ways to use land in fragile ecosystems and to maintain ecological stability since time immemorial (Davies 2015). They select their livestock species and breeds depending on the climate, environment, water, soil and fodder quality, accessibility, disease prevalence and other risk factors, but also based on cultural heritage.

It includes animal husbandry: the care, tending and use of animals such as cattle, camels, goats, sheep, etc. It also contains a mobile element moving the herds in search of fresh pasture and water. It can be considered as social organization based on livestock breeding as a primary economic activity (Ministry of Agriculture and Rural Development, 2004).

Pastoralism occurs in most countries in Africa, with highest numbers in Eastern Africa. Sudan and Somalia have each 7 million pastoralists and agro-pastoralists, followed by Ethiopia with 4 million. In Somalia pastoralists and agro-pastoralists represent around 90% of the total population, while they account for 23% in Sudan. Pastoralist livelihoods and way of life are increasingly threatened, according to the statement from the Eastern and Southern Africa regional consultation that contributed to this report (Eastern and Southern Africa statement and recommendations to IFAD, 2016).

As pastoralism is found in many variations throughout the world (Pastoralists Forum in Ethiopia [PFE]: 2007), composition of herds, management practices, organization and all other aspects of pastoralism vary from areas to areas and between social groups.

Pastoralists and agro-pastoralists of Ethiopia account up to 15 million people who belong to more than 29 nationalities or ethnic groups (PFE, 2004). The pastoralist areas are widespread in the six regional states of Federal Democratic Republic of Ethiopia including Somali region. According to Federal Ministry of Agriculture and Rural Development report (2004), the pastoral population range lands of the regional territory are located in the Eastern, South East and Eastern Hararge zones covering about 93 districts (woredas) those are currently referred as pastoralist areas in the region.

Pastoralists' and semi pastoralists' areas in Ethiopia are among those who are the most disadvantaged groups with respect to different social services. One of the major difficulties observed in pastoralist areas is poor educational service. To tackle this difficulty in Ethiopia in general, the Education and Training Policy (MoE, 1994) and the Education Sector Development Programs (ESDPI, ESDP II, ESDP III, ESDP IV, and ESDP V: (MoE) 1997, 2002, 2005, 2010, 2015) aimed at achieving access, equity and efficiency of education with special emphasis to such disadvantaged areas. Access, in this context is meant the broadening of basic education and provision of the required facilities for education. Equity implies the fairness to disadvantaged sections of the population which includes pastoral communities.

The pastoral communities of Somali Regional State have demands and constructive attitude towards education. These pastoralists are aware of the benefits of education, but full involvement and participation in education is affected by their survival needs (Ministry of Agriculture and Rural Development 2004). These existing and observed conditions made necessary the issues of adjusting facilities of access to basic education in particular for this group of citizens.

Different activities have been implemented by the government, NGOs, local and international communities to improve the educational services of pastoralist and semi pastoralist communities in the region. As one of these activities, the Somali Regional State organized a commission who is responsible for the facilitation of various development activities in the pastoralist areas (PCAE: 2004). In order to improve the poor educational services in these areas, Somali Regional Education Bureau in collaboration with the Pastoralist Concern Association of Ethiopia developed curriculum materials (student text books and facilitators' guides) on alternative base in the context of pastoral and semi pastoral area communities by translating and adapting the syllabi produced by the Ministry of Education.

Textbooks which are meant for children's learning at ABE centers found at pastoral and semi pastoral areas in Somali Region had been prepared by the Regional Education Bureau Curriculum Department starting from the year 1997 E.C. As the Alternative Basic Education delivery for pastoral areas was designed in three levels (level I, level II, and level III), the textbooks for level I were prepared in 1997 E.C; and those for levels II and III were simultaneously prepared in the year 1998 E.C. Those textbooks meant for level one have been serving since 1997 E.C. without any revision or improvement. Thus, conducting this research contributes to highlight and provide information about the appropriateness of these textbooks, particularly, regarding areas which need improvement and revision, if there is any.

## **1.2. Statement of the Problem**

Development means many things to many people. However, it should be reflected primarily on people rather than on any other things. Based on such understanding, education has been considered as an indispensable means in fighting against ignorance, poverty and a necessary step in a long march towards socio-economic development. Accordingly, providing quality basic education to all citizens has been acknowledged as a human right and a means for individual and

national development five decades ago. The world conference on education for all held in Jomtien, Thailand from 5 to 9 March of 1990, stated in its declaration, article 3, that strong commitment should be exerted to universalize access and equitable basic education opportunities to all with special emphasis to girls and women and the underserved group (WCEFA, 1990). This was reaffirmed by the Dakar, Education for All Framework for Action.

The development of technology contributes much impact on the education. The use of technical gadgets has distracted the student generation from their book study and theory oriented study. Hence, educational institution should embrace technology to enhance their education pattern and teaching methods (Montoya, 2013). Technology can be very useful for many people to get the education. It makes the process of obtaining knowledge easier. For example, the use of the Internet enables people to search and share anything, so we can obtain much information that we would like to have. However, it somehow has disadvantages that can worsen the process of educating. For example, students nowadays do not get used to writing the materials that they are learning in classroom. They become lazy to write because they are used to typing anything on their laptops that is considered much faster than writing it.

The process of learning is influenced by many factors. One of these possible factors is the learning materials. Learning materials can stimulate the learner in a way that reinforces learning (Gachukia and Chung; 2005). Besides the state of the learners' brain, the learning materials can play a significant role that reinforces students' learning. To this end, textbooks are the means by which factual knowledge is both organized and delivered to students. Textbooks serve to gather and bound an established body of knowledge. They function both as a mechanism for initial learning and as a reference for the future.

High quality textbooks will remain one of the most important factors in improving learning. Therefore, it is critical that students have access to quality textbooks if they are to learn (Bierman, 2006). Given the importance of textbooks in today's curriculum, it makes sense to spend more time and energy to be engaged in a rigorous preparation and evaluation of those books. While textbooks may look similar on the outside, they vary greatly in the depth of their content, their instructional design, their assessment programs, and their support for teachers (Montgomery, 2007). So since textbooks form an important medium for the learning process, the quality and appropriateness of textbooks need to be given due attention and should be assessed and investigated.

According to Montgomery (2007), textbooks are not solely sources of content. They are often the instructional basis for the curriculum. Therefore, it is that we need to develop criteria which measure the instructional worth of the various textbooks.

According to Ornestein (1996); Hartley (1998); Spalding (1955) and Marsh (1992) textbooks need to be evaluated against their qualities. Spadling (1955) further explained and recommended the formula he called 'scorecard' used to evaluate the quality of textbooks. Scorecard formula contains authorship, content, instructional aid, format or mechanical features. A number of scholars who dealt with the concept of textbooks agree on these features of textbooks. The difference may exist on specificity and generality or incorporating of main elements, sub-elements and vice versa. For example, Hartley (1985) saw these issues in two categories, format of the textbook or organization and content.

In fact, there are arguments on the demerits of textbooks. For instance, Aggrawal (1996) underlined the following points regarding the demerits of textbooks:

1. A textbook tends to dominate the education process. It has dominated the method of instruction and the evaluating process. It has narrowed down the scope of the curriculum;
2. A textbook does not provide direct experience. The students get ready-made knowledge and fail to assimilate it properly.
3. A textbook introduces uniformity for definite achievements and skills all initiative and spirit of both the pupil and the teacher.
4. A textbook is a hindrance in applying the methods of teaching like heuristic and inductive methods as textbooks provide ready-made answer which defeats the very purpose of introducing such teaching methods.

Though there are different arguments on the importance and necessity of textbooks, there is no strong position that disregards them from teaching learning process. Improvements in the quality of education are highly influenced by the quality and relevance of learning materials in general and textbooks in particular. (Gachukia and Chung; 2005). These improvements require continuous assessments of textbooks based on thorough evaluation and comprehensive studies that greatly contribute to increase the quality of textbooks (Gizaw: 2001).

Textbooks convey different information reflecting explicit values, ideas, aesthetics and knowledge. As Askerud (1997) argued, textbooks and other printed materials are part of the mass communication media. Because of such textbooks' characters, they are considered as printed part of mass media that require a systematic follow up for their efficiency and effectiveness. Therefore, access to and control of these media is source of power, and as media, textbooks need to be controlled for the purpose of maintaining their quality to render the intended services.

Textbooks are very important tools in teaching-learning process. They are used constantly because they are designed to present different types of subject matters in sequential manner in series of grades accepted by educators. It is a fact that textbooks are image forming and sources for information on social norms. They shape attitudes and teaching contents and this indicates that textbooks are the main sources of information, and are powerful to be accepted by students as significant phenomena in schools. Therefore, timely revision and improvements of textbooks based on comprehensive study are fundamental issues, especially, regarding provision of quality education. Level-I textbooks which are meant for pastoralist and semi pastoralist areas of Somali Regional State were not studied, improved or revised but they have been in use since their development in 1997 E.C.

A textbook is one of the many kinds of instructional materials used in learning. The textbook is usually succinctly written, tightly organized, and greatly condensed (Cohen, 2007). The purpose of this study is to assess the conditions of level one Af-somali, English, Mathematics, and Environmental Science textbooks prepared for Alternative Basic Education (ABE) students of pastoralist and semi pastoralist areas in Somali Regional State in terms of their scope and sequence, layout, objective-content association, illustrations, exercises and gender issues. This study was also conducted to fill this gap that the Somali level-I ABE pastoralist and semi pastoralist textbooks lack the areas under study.

### **1.3. Research Questions**

In order to meet the purpose of this research, the study focused on the basic research questions that state as: to what extent are appropriate level one textbooks for students of Alternative Basic Education centers at pastoralist and semi pastoralist areas of Somali region with respect to scope, sequence, layout, objective-content association, gender balance, illustrations and learning exercises?

Based on this, the following six specific research questions are formulated.

1. To what extent are the scope and sequence of the textbooks appropriate or inappropriate according to the level of the students?
2. Are the layouts (page set up, font size and line spacing) of the textbooks appropriate to the level of the learners?
3. Are topics in the textbooks in harmony with the objectives mentioned in their respective syllabi?
4. Is the gender balance maintained properly throughout the textbooks?
5. Are illustrations in the textbooks related to the topics and have clarity?
6. Are the learning exercises appropriate in promoting learner-centered approaches?

### **1.4. Objectives of the Study**

#### **1.4.1. General Objective**

The general objective of this study is to assess the extent to which the aforementioned textbooks are appropriate with respect to their scope, sequence, layout, illustrations, objective-content association, gender balance issues and exercises or activities.

#### **1.4.2. Specific Objectives**

The specific objectives of this study are to:

- a. assess the scope and sequence of the textbooks in terms of the students' level;
- b. identify the gap of the topics in the textbooks in harmony with their respective syllabi;
- c. investigate the gender balance throughout the textbooks;
- d. assess the appropriateness of the learning exercises or activities according to learner-centered approaches;

- e. make sure the relationship and clarity between the illustrations and topics of the textbooks; and
- f. investigate the appropriateness of the textbooks layout according to the level of the learners.

### **1.5 Significance of the Study**

The researcher chose to have a content analysis of textbook because not all of teachers know a good criteria of textbook that will be used in teaching. Teachers need to analyze the book used to make sure that whether the book is suitable for teaching or not. Teacher also can make some preparations before teaching their students by analyzing the book that will be used because teachers have known the contents of the book very well. So, teachers can make some changes for materials if there are some mistakes or unsuitability on the textbook.

According to the research study, the writer could provide an information on the content of the textbook and the criteria of a good Af-somali, English, Environmental and Mathematics textbooks. Furthermore, the researcher analysis Alternative Basic Education level-I textbooks in order to know the quality of the textbooks. Hence, his study will be beneficial for teachers who do not know how to know whether textbook that they use in teaching is good or not. Also, this study will provide a simple and an easy analysis in analyzing a textbook, so every teacher can easily make a textbook analysis without any difficulties and mistakes.

### **1.6 Delimitation of the Study**

Evaluation of textbooks needs comprehensive study that covers the analysis of all factors contributing to their appropriateness. However, this study is delimited to the evaluation of some of the conditions which are the contributing elements to the appropriateness of level one Alternative Basic Education textbooks that are developed for students of pastoralist and semi pastoralists' areas in Somali Regional State.

In a nutshell, this study focuses only on the conditions of scope, sequence, layout, objectives-content association, gender balance, appropriateness, clarity and harmony of illustrations with contents and appropriateness of exercises/activities of these textbooks (Af-somali, Environmental Science, Mathematics and English) toward the learner centered approaches of teaching and learning.

### 1.7 Limitation of the Study

The greatest challenge was lack of or shortage of ABE textbooks as the previous books became extinct whereas new textbooks have not been produced for the last two decades.

In addition to this one of the two major instruments of this study was the coding sheets. The quality of the coding sheets and the coding process can influence either positively or negatively the standard expected of the study because of its rarity. To tackle the problem,

- a. actions have been taken to adapt and make use of the works of different scholars regarding evaluation of written texts;
- b. attention was paid to hire individuals having at least first degree level of education and critical discussions have been made on the procedures to be followed in the process of coding during the training period, consensus were reached and follow ups have been made.

### 1.8 Definitions of Key Terms

**Textbook** is a designed and prepared material for alternative basic education participants of Somali region pastoralist and semi pastoralist areas with respect to subjects of study under basic education. It is a book prepared to help the learning process of children of pastoral and semi-pastoral areas of Somali regional state that participants and facilitators use as a source of instruction.

**Facilitator** is a person having complete or incomplete high school educational background with a short term training on how to use these textbooks and how to help and guide children of pastoral and semi pastoral areas for learning purposes.

**Participant** is a learner at pastoralist or semi pastoralist areas of Somali regional state who is using the textbooks under study for the purpose of learning.

**Illustration** is a printed material in a textbook intended to present ideas and concepts briefly, precisely and clearly. It includes pictures, graphs, diagrams, maps and tables.

**Layout** is physical features and organization of a textbook in its different parts.

**Nouns** are names of people, animals, things and places in different activities, expressions or illustrations which are used to express male, female, or common images those are taught by teachers, etc.

**Pronouns** are words used in activities, expressions, or illustrations which are used instead of nouns such as it, he, I, they, them, etc.

**Adjectives** are words that are used with nouns in activities, verbal expressions, or illustrations, etc to express quality, quantity, etc.

**A caption of an illustration** is a name or title provided and used to describe the illustration.

**Gender balance** is a situation where either of the two sex images (male or female) are treated, used or reflected fairly and equally in the page of grammar parts, pictures and activities in the text without favoring either male or female features.

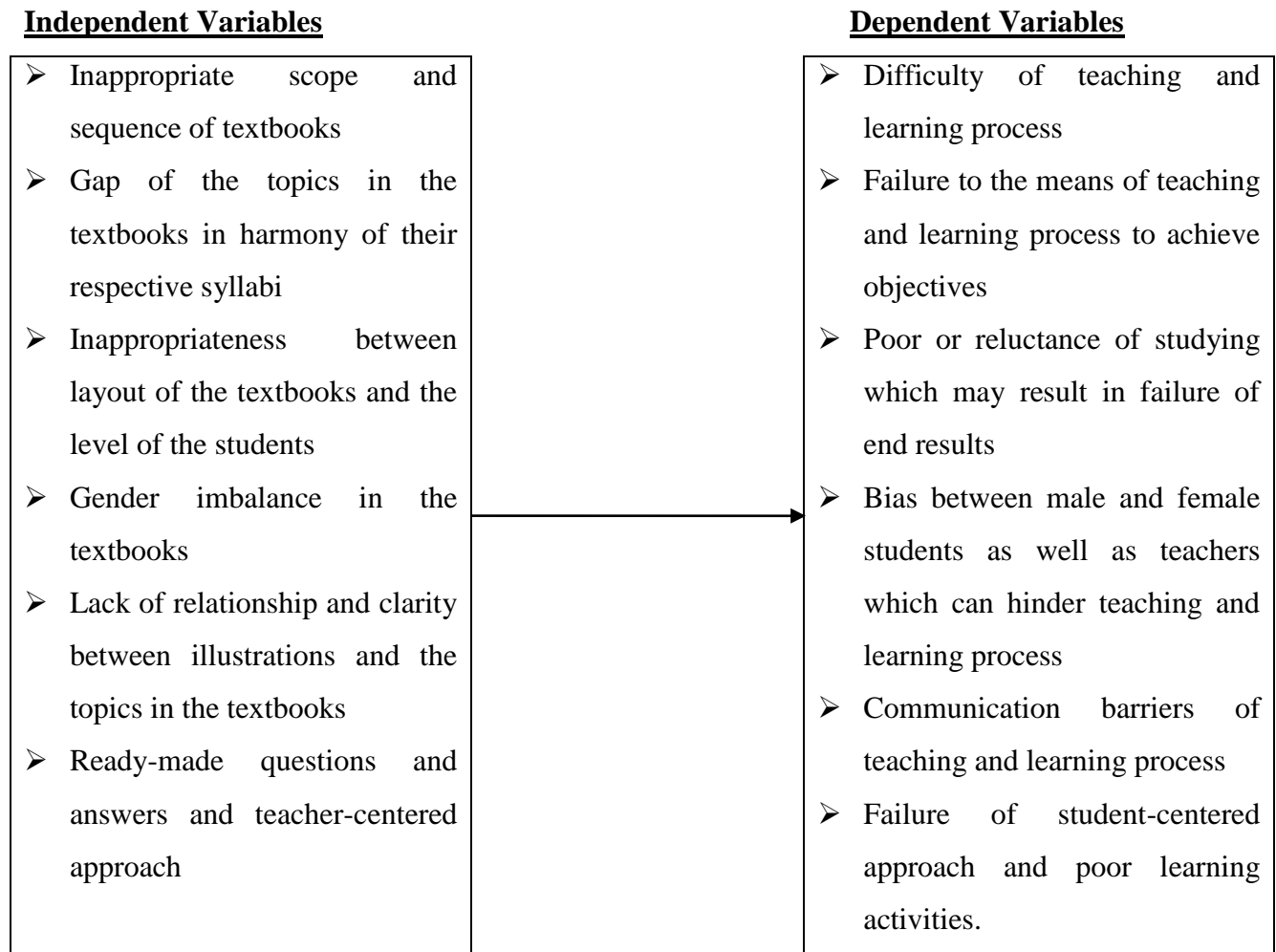
**Learning exercises/activities** are variety of exercises or activities provided to the textbooks or learning guides in order to promote activity oriented learning that are designed as to be performed by a group of learners or by an individual learner.

**Labeling of an illustration** is a provision of appropriate descriptions (names, codes, etc) for the whole or different parts of an illustration.

### **1.9 Organization of the Study**

This study is organized into five chapters. The first chapter deals with the introductory part of the study which consists of the background of the study, statement of the problem including basic research questions, objectives of the study, significance of the study, delimitation of the study, limitation of the study, definition of key terms and organization of the study. Chapter two treats review of the related literature that discusses the concept of content analysis. Chapter three deals with the research design and methodology of the study. Chapter four deals with data presentation, interpretation and analysis whereas the last chapter discusses the summary of major findings, conclusions and recommendations.

**Table1. Conceptual Framework**



As the independent and dependent variables always stand for the cause and effect of an event or events, the above framework shows causes and effects of gaps of textbooks analysis in terms of scope, sequence, harmonization of the topics with their respective syllabi, inappropriateness of the layout of textbooks. The texts in the left column display factors such as inappropriateness of scope and sequence, gap of the topics in the textbooks in harmony with their respective syllabi, inappropriateness of the layout of textbooks, gender imbalance and lack of relationship and clarity between illustrations and the topics in the textbooks whereas the texts in the opposite column of the right side display the effect of the aforementioned factors which are the current problems that hamper the quality of level one ABE textbooks of the students in pastoral and semi-pastoral areas of Somali Regional State and need to be solved in the future.

## **1.10 Summary of Chapter One**

Education is a basic human right, and it is central to unlocking human capabilities. In addition to this it generates trust, boosts social capital, and creates institutions that promote inclusion and shared prosperity (Larreguy, Horacio and John Marshall. 2017).As stated by Hinzen (2000), basic education is the base for learning to read, to write and to do basic arithmetic in the beginning of children's life.The MoE designed the Alternative Basic Education program in 2006 to improve the access of education for children who are unable to attend the four year formal lower primary education.

Pastoralism is a livelihood system based on free-grazing animals that is used by communities in marginal areas.The pastoral communities of Somali Regional State have demands and constructive attitude towards education.

Textbooks which are meant for children learning at ABE centers found at pastoral and semi pastoral areas in Somali Region had been prepared by the Regional Education Bureau Curriculum Department starting from the year 1997 E.C. High quality textbooks will remain one of the most important factors in improving learning.

The purpose of this study is to assess the conditions of level one Af-somali, English, Mathematics, and Environmental Science textbooks prepared for Alternative Basic Education (ABE) students of pastoralist and semi pastoralist areas in Somali Regional State in terms of their scope, sequence, layout, objective-content association, illustrations, exercises and gender issues.

In addition to this the general objective of this study is to assess that to what extent these textbooks are appropriate with respect to their scope, sequence, layout, illustrations, objective-content association, gender balance issues and exercises or activities.

Regarding the delimitation of this study, it is delimited to the evaluation of some of the conditions which are the contributing elements to the appropriateness of level one Alternative Basic Education textbooks that are developed for students of pastoralist and semi pastoralists' areas in Somali Regional State.

Moreover, the major limitations those the researcher has come across during the study are:

- a. Tackling the problems of the coding sheets as quality of the coding sheets and the coding process can influence either positively or negatively the standard expected of the study because of its rarity.
- b. Getting level one ABE textbooks in the region as they have become extinct.
- c. The cross-check between the coding sheets and the interview questions which took a long time to compare and contrast.

To sum up, definition of the key terms is a part and parcel of this chapter whereas the chapter ends up with the organization of the study which briefly displays the entire chapters of the study.

## **CHAPTER TWO**

### **2 REVIEW OF THE RELATED LITERATURE**

This chapter deals with review of the related literatures that point towards the conceptual framework related to the basic and specific questions of the study. In the process of teaching-learning, the contextual meaning and the purpose of textbooks, issues related with the appropriateness of textbooks are reviewed. Each of the core ideas raised in the research questions is also discussed. For convenience in addressing precisely the issues of interest, attempts have been made to treat and deal with the following subtopics.

1. The What and Why of Textbooks
2. Textbook Contents and Qualities
  - a. Scope and Sequence
  - b. Textbook Objective–Content Associations
  - c. Textbook Layout and Organizations
  - d. Gender Issues in Textbook Development
  - e. Exercises in Textbooks
  - f. Illustrations

#### **2.1. The What and Why of Textbooks**

Education is a basic human right, and it is central to unlocking human capabilities. It also has tremendous instrumental value. Education raises human capital, productivity, incomes, employability, and economic growth. But its benefits go far beyond these monetary gains: education also makes people healthier and gives them more control over their lives. It also generates trust, boosts social capital, and creates institutions that promote inclusion and shared prosperity (WDR, 2018). In many countries, individuals with higher measured skills have been consistently shown to earn more than their lower-skilled peers who have the same amount of schooling (Hanushek and others 2015) and (Valerio and others 2016).

Education is a fundamental human right, guaranteed by a number of international human rights instruments. It is specifically underlined by these instruments that all children are entitled to quality education (Gachukia and Chung, 2005). The roles of textbooks are critical in this aspect as a textbook is an important medium for the teaching-learning process.

One of the materials commonly used for the process of teaching/learning activities is a student's textbook. A Textbook is a book that treats a subject comprehensively and may be used by students as a guiding instrument for study. It is a book containing the assigned text for a course of study (Microsoft Encarta, 2007). According to Oxford Advanced English Learners Dictionary (2002), a textbook is a book used as a standard word for the study of a particular subject; one written specially for this purpose.

Textbooks largely determine not only what topics and ideas are taught in the classroom but also the way they are presented to students (Stern and Roseman 2004, p. 539). Textbooks deliver education and contribute much in shaping the daily routines of classroom activities. Even in countries where schools enjoy ample and various instructional resources, textbooks are the single most important support for teachers and students (Oliveira, 1995). It is not surprising then, that textbooks are a major concern of states, schools, teachers, parents, publishers and research community.

Montgomery (2007) pointed out that textbooks are a core part of the curriculum and crucial to the teacher as a blue print is to a carpenter. Textbooks are also considered as effective vehicles to support instruction as manuals for respective particular subjects. They can also be considered as an integral part of the curriculum containing knowledge, explanation and exercises essential to the understanding of each subject.

The characteristics of textbooks that meet the criteria, generally should suit the needs, interest and abilities of the students, suit the teacher, and meet the need of official public teaching syllabus or examination (Setiawati, 2010).

Textbooks define much of the content, scope, sequence and aims of the curriculum, as they provide overviews of a particular body of knowledge for learners. For instance, Johnson (2001) cited in Schneider (2007) argues that the definition of a textbook may be as general as to include other books made and published for educational purpose, or even any book used in the classroom. Therefore, textbooks, differently from any other books, are valuable instruments that aid the teaching-learning process in introducing, shaping, guiding, and stabilizing contents selected to be taught.

Further research has been conducted, for instance, on foreign language learning (Hartley 2013; López-Jiménez 2014) and the appropriateness of text structures in history textbooks (Berkeley et al. 2012). The introduced studies suggest two things in general. First, that both readers of average ability and readers of below-average ability prefer interesting, stimulating, narrative, and descriptive texts (Reichenberg 2013). Second, to foster learning and promote motivation, textbook language should contain clear, accurate, coherent, and consistent structures (Hartley et al. 2012) and avoid oversimplification.

The importance of a textbook can be viewed as it depends on the teacher's own teaching style, the resources available to him/her, and the accepted standards of teaching in every subject, etc. For instance, according to Ansary and Babaii (2007), teachers need textbooks for different reasons. Some of the arguments for the importance of textbooks include:

- a. a textbook is a framework, which regulates and times the programs;
- b. in the eyes of learners, no textbook means no purpose;
- c. without a textbook, learners think that their learning is not taken seriously;
- d. a learner without a textbook is out of focus and teacher-dependent, and perhaps the most important of all; and
- e. for teachers a textbook means security, guidance and support.

This argument illustrates that textbooks are crucial instruments as they are playing the role of directing and regulating, limiting the scope of contents intended to be addressed in the process of teaching-learning. Thomas and Kobayashi (1987) as cited in Aggrawal (1996:131) have discussed the importance of textbooks from three perspectives:

Firstly, the most common conception of a textbook in the eyes of both teachers and students is that it contains authoritative knowledge. The text contents are not only true, but they are also of such great value that learners should commit them to memory.

The second conception is that textbooks offer records of prior events which will influence future events; so textbooks can help learners envision the future; from the third point of view, a textbook reflects a particular standpoint or values from which to perceive life.

Thus, textbooks have the power to help students develop sense of confidence in the contents they are learning and the knowledge they are acquainted with. Furthermore they are designed for students as written guides to the subject contents of courses of studies. They contain exercises, study questions and practice materials. They also afford students a means of reviewing and reorganizing their knowledge recover, stressing on the importance and values of textbooks, Aggrawal (1996) explained that a textbook is one of the most important and vital elements conducive to effective and efficient teaching learning process. As a result, textbooks remain essential tools for preserving and diffusing the world's storehouse of knowledge and wisdom.

Modern textbooks are called upon to go beyond the imparting of subject matter to students and to help teach competencies, skills, and 'powerful knowledge'(Young 2011), such as key scientific concepts.

A textbook can be considered as a self-teaching device (Aggrawal, 1996), for it enables students to learn through their own efforts and provides an opportunity to a student to reflect and evaluate their understandings. A student can find the specific information he/she needs in a book. He/she can review materials he/she has read from time to time to clear up uncertainties and also move ahead as quickly or as methodically as his/her individual capacities for comprehension permit. A textbook guides the students in learning at the school and at home. These features (specific guiding role, its service as self-teaching device, etc) distinguish it from general and reference books which a student consults once a while.

Textbooks serve both students and teachers as tools and as tutor guide books. Throughout the world, teachers use textbooks to guide their instruction; so textbooks greatly influence how content is delivered (Kulmetal; 1999). Textbooks play an important role in making the leap from intentions and plans to classroom activities by making content available, organizing it, and setting out learning tasks in a form designed to appeal to students' learning interests.

Many scholars in the field of education firmly believe that the school curriculum/textbooks can provide a fix to societal problems (Banks , 2010), Chinyani (2010;12(7):240-250); Bruegilles & Cromer (2009). Bruegilles and Cromer further underlined that, in any particular society and across the world, textbooks have an impact far beyond the immediate confines of school and learning. They see textbooks as a basic learning tool for pupils and teachers; a tool of negotiation between the various actors those are involved in its production and use; and an element of communication within families, especially for values.

Bruegilles and Cromer again highlighted that textbooks are powerful levers of social change in propagating universal values. They further stated that not only do textbooks contribute to learning through dissemination of knowledge, but they also play a role in children's upbringing by directly or indirectly transmitting models of social behavior, norms and values. Textbooks are therefore a tool for both education and social change.

A textbook is a tool in the process of purposeful learning. Learning is a process in which the needs of a student are aroused and he/she finds ways of satisfying the needs. Thomas (2014) examined how textbook format (game-based versus traditional) affected students' mental effort and time spent on a task. He reported that students spent significantly more time on tasks which are carried out through game-based textbooks, whereas differences in mental effort were not evident.

Textbooks are also national educational documents. In the process of the implementation of the curriculum at hand, one of the resource materials are textbooks prepared on the basis of the curriculum guides of the subjects of studies. Textbooks are the most explicit manifestation of national education philosophy and the expression of national political orientation (UNESCO,2005).

Textbooks are critical tools to the success of the implementation of educational processes. They are principal elements in the educational process; vital for both teaching and learning, at all levels in general, and at the primary level of education in particular. Textbooks are used by teachers, at these levels, as tools for passing knowledge to their pupils.

Textbooks provide an overview of particular body of knowledge for students. Students' textbooks define the content, sequence and aims of curriculum (Bahar, 1994). Therefore, the preparation and production of textbooks require due attention of professional human resources. Marsh (1992:51) underlined that, as part of the process of the preparation, students' textbooks should:

1. be written at a level suitable for particular group of learners;
2. be carefully sequenced and illustrated; and
3. be include exercises and different activities.

On the other side, there are also counter arguments regarding the use and importance of textbooks. For instance Ansary and Babaii (2007) argued that:

- a. every group of individual student has different individual learning needs, no textbook can be a response to these all different needs; i.e. textbooks lack the capacity of addressing individual learning needs of each student.
- b. some of the contents in a textbook may not be relevant for and interesting to all students, as each student may have his/her own interest, background, etc.
- c. a textbook is confining, i.e. it inhibits teacher's creativity;
- d. textbooks have their own rationale, and as such they cannot (by their nature) provide for a variety of levels, every type of learning styles, and every category of learning strategies that often exist in the class, and most important of all;
- e. teachers may find themselves as mediators with no free hand and slave in act to others' judgments about what is good and what is not.

In fact, there are demerits of a textbook if not used properly. Aggrawal (1996:132) also mentioned the demerits textbooks may have if not used properly. According to this author:

- a. a textbook introduces uniformity and rigidity for definite achievements and kills all initiative and spirit of both the pupil and the teacher by ignoring differences in backgrounds, attitudes and needs;
- b. a textbook is a great hindrance in the new methods of teaching like heuristic and the inductive. The students get ready-made answers and these defeats the very purpose of introducing new methods; and
- c. there is every danger that the textbook may be used for the purpose of indoctrination of the ideas and beliefs of the party in power in a given country which can harm the learning situations of the learner.

The use of textbooks in teaching has both advantages and disadvantages, depending on how they are used and what the contexts for their use are. What one teacher considers an advantage in a textbook, another teacher may consider a disadvantage (Graves 2000: 175).

The following list contains the most frequently stated advantages of using textbooks (Graves 2000: 175; Basturkmen 2010: 149):

- a. It provides a syllabus for the course because the authors of the syllabus have made decisions about what will be learned and in what order.
- b. It provides security for the students because they have a kind of a road map of the course: they know what to expect and they know what is expected from them.
- c. It provides a set of visuals, activities, readings, etc., and so saves the teacher time in finding or developing such materials.
- d. It provides teachers with a basis for assessing students' learning. Some textbooks include tests or evaluation tools.
- e. It may include supporting materials (teacher's guide, cd, worksheets, and video).
- f. It provides consistency within a program across a given level, if all teachers use the same textbook. If textbooks follow a sequence, as within a series, it provides consistency between levels. Textbooks also have limitations which can lead to

teachers' and learners' dissatisfaction with the course. The following list contains the most frequently stated disadvantages of using only ready-made textbooks (Graves: 175; Basturkmen 2010: 149):

Graves (2000: 176) suggests that, in order to minimize difficulties when selecting textbooks, teachers should: use the textbook as a resource for students, but not the only resource; use a textbook as a guide, be free to modify, evaluate, develop, change, eliminate, or add to the material in the textbook, supplement the textbook with lots of outside readings.

In general, textbooks have brought with them a range of reactions possessing two opposite extremes. One position argues that textbooks are valid, useful, and labor-saving tools. The other position holds that textbooks are not as such valuable and positively contributing much to the teaching-learning process, rather they are mostly "masses of rubbish skilfully marketed", i.e. they are market oriented, the main purpose in this case is to gain market profits (Ansary and Babaii; 2007).

However, most of the oppositions to the textbooks have been critical of particular methods of text education and therefore offers no final judgment that the textbook should be eliminated. As Cronbach (1995) and Gizaw (2001) explained, each of the criticisms, no matter what its origin is, points toward modifications of the textbooks and methods of its proper use but not its avoidance and abolition.

## **2.2. Textbook Qualities**

Increased attention has been paid to the quality of textbooks. Its preparation as quality of textbooks is one of the pressing issues in academic activities today in relation with the demand of quality education. One can define the quality of textbooks based on its appropriateness with respect to social needs, general educational objectives and up-to-date pedagogical and psychological theories of learning (Cunnings worth 1995; Gizaw 2001; Oliveira 1995; Schneider 2007). Therefore, its appropriateness with respect to local conditions of the implementation and use areas those need to be considered as one of the factors contributing to the quality of a textbook.

As viewed by a number of educators ( for instance, Nogova 2007; Cronbach 1955), quality textbooks not only serve as the main source of knowledge, but also need to help in developing the student’s personality, in respecting his/her individual skills, stimulating interest in learning and in supporting interactivity.

As Nogova (2007) and Ucbenika (2007) argued further, although the nature and level of contents in a textbook are important, so are its design and organization. These must be matched with the level of the pupils, the subject and the child centred teaching–learning style which is being encouraged in Ethiopian context as textbooks support the curriculum by reinforcing and extending the work of the teacher. Therefore, it can be considered (as to my opinion) as one of the requirements of quality of textbooks that can lead to better teaching in the context of fitness for need.

A number of educators have analogous position regarding the features and qualities of textbooks. In judging the significance of a textbook, the qualities stressed below by the authors (Aggrawal 1982; Haynes, 2005; Olivera, 1995; Schneider, 2007; Ucbenika, 2007) are worth mentioning. Some of these are, correspondence of the text with the objectives of the course, up-to-dateness and accuracy of the content presented with respect to the objectives set for the adaptability of students’ abilities and interest, representation of gender balance; strengthening of critical thinking and problem solving; suitability of learning exercises; appropriateness of layout and organization; volume, binding, clarity of objectives, summaries and headings, appropriateness of illustrations etc. included as contributing factors to the qualities of textbooks those calling for careful preparation, fair use and thorough evaluation.

In addition to this the content in the textbooks should be persuasive enough to induce all the requisite skills suited to an esteemed society in the students. If the textbook is too advanced or too simple for the students, the teacher will inevitably be faced with problems. In the selection of a textbook, it is important to conduct an evaluation to ensure that whether it is suitable or not. In addition to being a learning instrument, textbooks are also used as supporting teaching instruments. “The student’s book usually comes with other materials such as workbook, a teacher’s book or even additional multimodal texts for reference as a textbook package (Masuhara and Tomlinson 2008)”. All these things are designed to give cohesion to the learning and teaching and to make it more authentic.

### **2.2.1. Scope and Sequence**

A scope and sequence is an overview of the skills and content covered in your program's curriculum at each class level over a period of time (scope) and in a particular order (sequence). Fully developed unit plans will require more detail than the outlines sketched here in the scope and sequence.

The scope and sequence is a relatively comprehensive listing of the skills, strategies, concepts students need to internalize to become literate, successful readers, writers, and thinkers. Therefore, if textbooks lack course coverage, breadth or width which is the latitude of the curriculum and the order of the contents and activities in a successive manner, they mislead both the teaching–learning process and finally cause failure of quality education (My own words).

In addition to this once the scope and sequence is completed for a level, the next steps are to: revise this draft as needed and/or recommended from the feedback you received; or use this draft to develop coherent instructional units and sample lesson plans; or complete the other class levels, taking care to align the levels and prevent any learning gaps.

### **2.2.2. Textbook Objective–Content Associations**

The process of developing textbooks has two major aspects, preparation and production. The preparation aspect of textbooks development involves planning, writing, piloting and editing stages. The production aspect also involves designing, preparation of main plates, printing, binding and pricing (Lemma, 2007).

Planning is the stage where the text developer or every concerned body of the textbook preparation (development) issue examines the national educational objectives and instructional objectives of the subject for which the textbook is expected to be prepared (Lemma, 2007). Such instructional objectives are interchangeably referred as behavioural objectives, learning objectives, or performance objectives.

Performance objectives are precise statements of capability that if possessed by an individual learner are those which can be observed as performance (Taba, 1962; Krathwol, 1974). These objectives have different levels of specificity and particularity: the most general and broad level, the more concrete level, and the detailed level. The third level which is detailed and stated in

behavioral terms helps to generate instructional materials such as textbooks, manuals, worksheets, etc. those which can assist the development of teaching–learning materials. This detailed analysis smooth the progress of the sequence of goals, the plans, the objectives of specific lesson plans and the intensity of achievement required.

Content can simply be defined as the body of knowledge or a set of students’ activities contained in a textbook or in a course of study or which can only be considered as representative sample of all the knowledge that can be included in it in order to facilitate the learning experience (listening, observing, reading, writing, performing mathematical calculations, dramatizing, experimenting, researching, etc (Amare, 2000). Therefore, evaluation of how contents dealt with in the textbook associated with objective set in the respective curriculum guides or the syllabi should be one of the basic issues of textbook development in relation to its qualities. All the levels of specification of objectives are required to direct the planning of instructional process as the first guides to the development of the second level; and the progress of the second guides to the development of the third (Kulm and Teristman; 1999 and Taba, 1962).

The most important function of educational objectives under such a context is their role in guiding the selection of contents to be addressed and the method/learning experience to be employed. AsTaba (1962) and Tyler (1949) argued, the importance of instructional objectives is not limited to the purpose mentioned earlier only. Instructional objectives are influential in deciding on the most valuable and wanted learning activities, in describing the type of mental or any other else powers which need to be developed. As Taba (1962) viewed, the classification of these rules can help in developing the method of selection of the contents of the subject matter, and in determining its breadth and depth. As a result, contents provided by a textbook must match with the learning objectives set and expressed in the respective subject syllabi.

### **2.2.3. Textbook Layout and Organizations**

#### **Layout**

One of the major steps used in textbooks' preparation is the design of its layout. Design of a textbook layout is the way the text is made so that it has certain appearance (or look like). The designer plans the textbook's layout format: page size, page setup, and number of lines per page, font size and style, arrangement of pictures, and similar matters. Textbook design includes its layout and content organization as the major elements.

Layout of a textbook refers to the way in which the materials such as words and pictures in the textbook are arranged. It is the design or arrangement of printed material such as the pages of a textbook, the art of designing printed material (Microsoft Encarta, 2007). Textbook's page layout refers to the adjustment of margins, text positions, illustration positions and the like, that are decided in the process of textbook design.

#### **Organization**

According to Microsoft Encarta dictionaries (2007), one of the possible meanings of the word organization is the effectiveness of the arrangement (configuration, design, format, composition, constitution, make-up, pattern, structure) of separate components in a coherent whole. Therefore, it is worth explaining organization of a textbook as the way in which the textbook's different parts of contents are combined and arranged.

There are issues that need to be considered by textbook writers for the preparation of textbooks. Textbook writing is related to instructional design. As Schneider (2007) pointed out, one might look at textbooks in terms of some instructional design models and methods. Therefore, before starting to write a textbook, the writer need to know and define the contents those students are supposed to learn, for example, if the students are expected to solve problems, then the writer has to prepare books that assist students to enable them to do so, and also need to think of its layout and further organizations of contents.

## **Layout and Organization**

Textbook writing for specific subject and level of learners need to be guided by the national education philosophy which in turn guides educational goals and objectives. With this regard, according to Gachukia and Chung (2005:2-3), some of the main issues of concern that textbook writers need to remember while writing, textbooks include:

- a. goals and objectives of education of the country;
- b. learning theory as a guide to textbook writers and designers;
- c. cultural reflection and textbook writing; teaching and learning methodologies;
- d. integrated curriculum approaches in the textbook;
- e. consideration of language as a medium of instruction;
- f. assessing teaching and learning;
- g. gender representative as a critical factor in textbook writing;
- h. language issues; and
- i. technical requirements of manuscript production.

Thus, textbook writing requires awareness, considerations and know-how of different existing situations, value systems, learning methods, teaching principles and techniques of textbook writing.

As mentioned above, textbooks must match closely with the curriculum and with specified learning outcomes. Therefore, textbook authors and designers have important responsibility of deciding how contents in the material are to be organized and presented as well as select the teaching method for the accompanying of teacher's guides with reference to the curriculum at hand. For instance, Gachukia and Chung (2005: ix) further argued that the writing of textbooks demands the textbook writer possess certain essential capabilities. Some of these capabilities include:

- a. knowledge of a particular subject and how to break down facts into manageable units; know-how on how to conduct research for background information pertinent to the subject area being covered;
- b. knowledge of how learners learn and the conducive conditions for learning;
- c. knowledge of varied teaching-learning methodologies and how to avoid monotony in the teaching-learning process;
- d. appreciation of visual, audio and other teaching-learning aids and how to prepare them cost-effectively;
- e. capacity for innovation, creativity and improvisation;
- f. familiarity with firsthand knowledge of learners of various ages and abilities;
- g. ability to communicate effectively in addressing the needs of teachers and learners; and
- h. Knowledge of the context in many cases multiple contexts, in which the textbook will be used. These include geographical, ethnic and racial contexts, rural/urban backgrounds, socio-economic groupings, and religious diversifications.

Thus, as textbook writing requires expertise in the subject matter for which the textbook is going to be written, knowledge of educational psychology, know-how in educational technology, communication skills and the like also are some of the important awareness aspects to be possessed by textbook writers.

Neumann (1980) examined the importance of layout and organization of textbooks as a good teacher individualizes his/her methods to suit the range of learning abilities represented in the classroom; a good textbook should also do much the same. Just as a lesson taught by a teacher is more than chalk and talk, a textbook page, unit or chapter should be more than a presentation of fact or a setting out of exercises. It needs to be visual, offer structure, variety and present its materials in different motivational and attractive ways. Therefore, textbooks are required to be organized and divided into units/chapters that fit the classroom/learners' situations for which the textbook is meant for and the time available with appropriate page layouts. It is supposed to provide room for individualization, for the different abilities represented in the classroom.

Textbooks are likely to be designed not only in terms of subject objectives but also in such a way that they should meet the needs of the learners in several ways. For instance, Urbana (2007) explained that teachers and students both want visually stimulating textbooks that are well organized and easy to follow, so the layout of a textbook should address such interests of its users.

Decisions about page size of a textbook are, as Hartley (1978) pointed out, the baseline from which the remaining typographic decisions such as layout of the page, the interline spacing, the line length of the text, the position of illustrations, and so on are made. Therefore, page size should be related to the circumstances in which instructional materials are used.

The design of layout and contents organization of a textbook is one of the important issues of textbooks preparation process. As cited by Gizaw (2001), this issue has rigor concern of educators as it is the basic variable in textbook writing contributing to the quality of textbooks. The two problems of the textbook writer in this case are:

1. How to present the material economically, and
2. How, at the same time, to make it easy to use.

These show the call for approach to the issue of the two basic kinds of text structures: external and internal organizations. External organization is the overall design of the text, the format within chapters, the beginning and end of the text such as preface, introduction, table of contents, summaries, references, and so on. Internal organization is described by how the issues and ideas are interrelated; whether they are over emphasized or not, whether they are essential or marginal, how consistent and how they are united together.

Once the issues of design of layout and organization about the textbooks to be developed have been sorted out, the overall structure of the book is considered. The first step is to identify the major sections, topics, and units or parts of the book. They may be further broken down in to sub-units or chapters, each representing a sub-area of the main topic.

In setting chapters, each chapter should be related to the preceding and the subsequent chapters. The sequencing of chapters is important in building up ideas and concepts as the student progress through the course. Normally, each chapter/unit is recommended to have introduction, systematic presentation of contents, summary and exercises.

Aggrawal (1982), Hartley (1985) and Tesfaye (2005) suggested procedures used to organize contents of textbooks. They recommend that organization of contents of textbooks to be designed in the format that consists of titles, headings, summaries, spacing, table of contents and references with an appropriate font size. All these concepts pose the challenges of inclusiveness, yet recognition of unique needs of specific groups. Therefore, as these authors underlined the importance and significance of these elements in the design of text organization which necessitates to get appropriate considerations because text organization is accepted to contribute positively to the quality of the textbook.

Lepionka (2003) cited in Schneider (2007) pointed out and forwarded his recommendation to divide in parts and organize contents of a textbook into chapters/units. Chapter/unit development needs also due attention. Regarding this issue, the aforementioned author argued that chapters' development should include various functional elements that will at least attract and help the learner to understand the text.

Therefore, chapters/units need to have rooms where the readers are informed at the outset what, why or to what end they are reading; where provision of opportunities for learners to review, reinforce, or extend their learning takes place; where integrated pedagogical devices are given. Therefore it is recommended that contents presentation in a textbook need to be organized and arranged in to different appropriate parts. These parts may include chapters or units.

In chapters' development, due attention is required to perform with the structure having:

- Overviews (previews), introductions, outline (text bullets or graphics), focus questions, learning goals and so on (Schneider, 2007).

This part includes the provision of motivational aspects where one can include something that can facilitate to gain attention of the reader in the first step; something that can aid to frame and organize in the second step; and something that can assist to recall from his/her prior knowledge in the third step.

Questions, self-assessment (usually simple quizzes), small exercises, substantial exercises and problem cases fill-in tables to prepare a real world task, ideas for projects (academic or real world);and bibliographies and links (that can be annotated) (Schneider, 2007).

This part contributes to provide opportunities for learners to review, reinforce, or extend their learning.

- Emphasis of words (bold face); incidental notes that summarize paragraphs; lists that highlight main points; summary tables and graphics; cross-references that link backwards (or sometimes forwards) to important concepts; markers to identify embedded subjects (e.g. an "external" term used and that needs explanation); study and review questions; pedagogical illustrations (concepts rendered graphically); tips (to ensure that the learner doesn't get caught in misconceptions or procedural errors); and reminders (e.g. this is where something that was previously introduced is remembered) (Schneider, 2007).
- Whatever format one decided to use, as Tesfaye (2005) argued further, layout of a textbook is very important that it should be simple and easy for students to follow, so that students can easily be able to see at a glance what they are supposed to do at a particular time and place in the unit or lesson. Therefore, textbook preparation requires due attention and professional decisions or decision of peoples with skill of the textbook design of layout and contents' organization.

#### **2.2.4. Gender Issues in Textbook Development**

To understand what is meant by gender, it needs to distinguish the difference between "sex" and "gender". Gender is a concept that refers to the roles of girls, boys, women and men as defined by their society (Oyebola, 2007 and WNN, 2007). The process of the definition is continuous and goes on from childhood to adulthood. The actual definition for each society is reflected through the division of labor (gender roles), available opportunities and assignment of responsibilities as

well as the whole aspect of access to and control of assets, resources and decision-making processes. "Gender" has social, cultural and psychological connotation. According to Oyebola (2007), gender is a dynamic concept, gender roles for men and women vary greatly from one culture to another.

It is a fact that there are differences between men and women, which are biologically determined from conception. Many of the roles assigned by society to men or women are not biologically determined but mainly socially constructed and imposed. Whereas "sex" is a biological term connoting maleness or femaleness depending on sex organs.

Many institutions reinforce the social construction of future women and men from that of girls and boys; among these institutions, schooling has been the most important. As textbooks are important socializing agents, gender is a critical issue that needs to be properly addressed in textbook preparation. Textbooks present a world from which girls and boys adopt respective role models and influence their thoughts, attitudes and life aspirations, and relations with the opposite sex. Although in many cases the writer's input in a textbook is more of a technical skill, the writer can make learning more practical and interesting by creating a world with human characters doing things. The textbook, thus, has to portray the gender realities of the social world.

As an important medium, textbooks are supposed to be written in such a way that they empower both girls and boys on equal basis. This in turn should have positive influence on their learning, retention, completion and performance with the education process.

One of the high points of the world conference on women, in Beijing, China, in 1995 was the assertion that no sustainable national development could ever be possible unless women are given equal right to education. Such a right includes access to textbooks as an actual source of knowledge.

The World Conference on Education for All (Jomtien (Thailand), 1990) drew attention to the gender gap in educational opportunities and its consequences for human development. It also requests equal rights for girls and boys to education and asserts the importance of education as a social and cultural right. These require the implementation of gender balance with respect to all

activities and devices in use including teaching–learning materials such as textbooks. Furthermore, since education is an agent of development through its impact on health, mortality, productivity, household income and fertility rates, improvement in women’s education brings with it higher social and economic returns (ASQ,2007).

Textbooks are the most important means of getting information with in the hands of pupils. Therefore, the contents and illustrations of textbooks are the crucial elements in reinforcing, reshaping and changing pupil’s concepts, attitudes, norms and expectations concerning the positions of male and female. For instance, Kone (1996) explains, gender biases portrayed in different forms such as in nouns, pronouns and adjectives and order of appearance contribute in making females to be submissive in practice and lead to more male involvement than female.

With this regard, Genet (1991), states that textbooks can contribute to the low performance of girls in education by transmitting sex stereotyped images. But in real sense, members of both sexes should be represented as human beings with human strengths and weaknesses not on the base of masculine and feminine. Women and men should be treated with the respect, dignity and seriousness; neither should be trivialized nor stereotyped.

Textbooks in our country are also one among many socializing factors in the lives of children. Textbooks present models of people and present behavior and taught patterns which are implied good to copy. Therefore, it is also through the medium of school textbooks that children develop their social activities. Regarding the contributions of textbooks and schools for socializing process of girls and boys, Williams (1987) states that books and schools provide models for them, instructing them, informing them in countless ways often indirectly of the values of the society and of its expectations of them as females and males.

From the textbooks children read and visualize, learn about sex-role identification and sex-role expectations. Pupils learn about the outside world, about diverse cultural norms, about what other people think and feel. They learn what behaviours are acceptable. As Olivera (1995) pointed out students’ textbooks are critical in informing a child’s identity and personality. Therefore, understanding and critically analyzing what children read or visualize has to be the focus of great deal of attention.

Therefore, a textbook is symbolic of school and modernity, a means for knowledge development. Thus, the issues of gender balance in textbook preparation have to be handled in the uses of words, illustrations, sentence constructions, activities and so on.

### **2.2.5. Exercises in Textbooks**

Among instructional techniques, the most important one that characterizes every method of teaching is questioning. Like other instructional devices, exercises/activities are important tools of the teaching-learning process. In line with this argument, Warfenberg and Mayrhofer (2010) conducted a study and reported that probably, in any effective instruction, no technique of teaching is more widely used than questioning frequently in the form of exercises.

Regarding the importance of exercises in the process of teaching learning, Taba (1967) pointed out that, teachers' manner of asking questions and approach providing learning exercises are by far the most influential teaching acts. In order to make questioning effective, questions should be clear and understandable, well organized and defined, reasonable, relevant and demanding for responses within the reach of the learners by emphasizing the contribution of exercises in developing critical thinking capacities of students.

Underlining the issue, Cronbach (1955) suggested that textbooks are source of materials on which students react and practice desirable responses of analysis through different exercises and activities. According to this author, the argument lies on those textbooks that are traditionally regarded as infallible authorities; everything possible is done to make them infallible; students who go through years of experience in accepting what the text says are continually confirmed in the attitude of accepting the printed word without question. As a contrary supposition, the argument is that the printed word is somebody's statement to be believed only after scrutiny and testing which is necessary for the reader who is trying to solve any problem outside the school.

Theodore Struck cited in Aggrawal (1996:139) notes the importance and significance of questioning and answering as having a prominent position in all kinds of learning processes as:

*Questioning in exercises/activities plays an indispensable part in learning, teaching and testing. If used in the right way at the proper time, questions lead to new realms of understanding; they serve as means of organizing knowledge or correlating the results of educative experience; of tying together units of learning and of integrating personality.*

Therefore, questioning in exercises/activities are important tools in implementing activity oriented and child centred approaches of teaching.

Questions are essential parts of exercises or activities. The purpose of questions as exercises or activities as Aggrawal further explained (1996: 139) could be viewed as:

- a. to test the previous knowledge of the learners;
- b. to enable learners to recall, recognize, think over, reason about and elicit something;
- c. to stimulate interest and effort on the part of learners;
- d. to keep learners mentally alert;
- e. to link new knowledge with old ones;
- f. to secure the cooperation of the students;
- g. to diagnose the weak points of the students; and
- h. to synthesize.

Thus, exercises have a number of teaching-learning advantages in the process. Questions in addition with different types of activities such as projects, dialogue, reporting systems of field trips, etc. can assist learners and enhance their learning. This leads to the conclusion that students textbooks need to have rooms for and provide learners with different activities in different forms as questions, project works, etc.

As Hartley (1985) viewed, questions used for the purpose of exercises and activities may be interspersed within the text body or presented in a list at the end of a chapter/unit. The location of questions or exercises may vary depending on the nature of the topic or learning experience. Factual questions can be interspersed in a passage before paragraphs of relevant material, often lead to specific learning, given after relevant content sometimes lead to more general learning. To sum up, provision of various assessment methods by using different

techniques in a textbook is not only for assessing purpose, but also to enhance learning (Oybola: 2005). Therefore, provision of different forms of exercises, activities and evaluation techniques in a textbook are deemed to be important as part of the quality of a textbook.

### **2.2.6 Illustrations**

Transmission of ideas and concepts may not be comprehensively clear to the reader, unless the writer makes use of different writing techniques and variety of illustrations. An author may effectively communicate with his reader if he/she makes use of diagrams, picture, drawings or other pictorial devices, which are known as illustrations. According to Oxford English Dictionary (2002), illustrations are pictures or drawings used with the text for the making of facts clear or evident to the mind.

Illustrations are important aspects of textbooks. For instance, as Jonassan (1996) pointed out, illustrated visuals that contain text-redundant information can facilitate learning. This author argues that illustration variables such as size, page position, style, colour, and degree of realism may direct attention but may not act as curvilinear relationship between the degree of realism in illustration and the subsequent learning that takes place.

In an alternative method of teaching, illustrations aid learning and assist the learners understand better what they read in a book. This is why textbooks designed for the primary level usually contain many illustrations. However, considering the fact that children at the primary level are very young, their minds could easily be shaped by what they see in the illustrations in their school textbooks. Because of such children's behaviour, illustrations in textbooks of primary level in particular should avoid of unfair practices such as gender stereotypes, which could have negative effects on the pupils self image, ability and future aspirations.

Illustrations are textual in purpose rather than decorative in students' textbooks. As conspicuous element of the textbook's appearance, illustration deserves the textbook's designer's skill. As Williamson (1983) pointed out, knowledge of the textbook production methods, and ability to adapt and arrange illustrations for presentation in book form are essential to success.

The size, position and the provision of captions are some three elements among the factors those contribute to the clarity and effectiveness of illustrations and require professional decisions and adjustments. As Williamson (1983) argued, illustrations need to be of proportional with respect to the context of the text and standard of its users, need to be at appropriate positions and should have to have elaborating captions. The designer regulates the position of illustrations in relation to each other, to the text, to the page, and to the rest of the textbook.

When an illustration shares a page with text, the reader may prefer it to appear above or below the printed text. Each text illustration should appear in the same opening as his/her first reference in the text, which identifies it. Illustrations, as distinct from decorations, should not as a rule to be printed on end papers.

Captions are not at equal font size with the text. They are usually set in sizes one or more points smaller than the text, to differentiate one from the other (Williamson, 1983; Hartley, 1978). When several illustrations are printed on one page, the captions are sometimes grouped together, linked with the pictures not by position but by illustration numbers.

As traditional sayings and experience remind the importance of illustrations boldly, a single picture can better transmit message than a thousand of words. Tesfaye (2005) viewed that illustrations need to be thought as an integral part of the textbooks design and development processes and to be given the same degree of attention as the written words. Therefore, illustration devices are at times not only more informative and effective than pointed words but also break monotonous tension.

Among the purposes of illustrations in a textbook, some can be listed as:

- a. to aid learning;
- b. to remind key concepts or ideas;
- c. to stimulate interest as a motivation;
- d. to provide a variety of approaches in the process;
- e. to suit to learning styles of different learners; and
- f. to make the teaching method effective.

Regarding the importance of illustrations, Tesfaye (2005) pointed out that illustrations can help learners in learning from texts by:

- a. stimulating interest;
- b. making materials more attractive;
- c. presenting information in a more accessible way;
- d. providing useful overlap with information given in words; and
- e. breaking up large blocks of texts to make them more approachable.

Therefore, illustrations can assist the learning of a text; play significant role in understanding and visualizing concepts. Thus, appropriate illustrations need to be provided in textbooks.

### **2.2.7 Chapter Summary**

One of the materials commonly used for the process of teaching/learning activities is student's textbook. A Textbook is a book that treats a subject comprehensively and may be used by students as a guiding instrument for study. It is a book containing the assigned text for a course of study (Microsoft Encarta, 2007).Montgomery (2007) pointed out that textbooks are a core part of the curriculum and crucial to the teacher as a blue print is to a carpenter. Textbooks are also considered as effective vehicles to support instruction as manuals for respective particular subjects. They can also be considered as an integral part of the curriculum containing knowledge, explanation and exercises essential to the understanding of each subject.

One can define the quality of textbooks based on its appropriateness with respect to social needs, general educational objectives and up-to-date pedagogical and psychological theories of learning (Cunnings worth 1995; Gizaw 2001; Oliveira 1995; Schneider 2007).

The scope and sequence is a relatively comprehensive listing of the skills, strategies, concepts students need to internalize to become literate, successful readers, writers, and thinkers. Therefore, if textbooks lack course coverage, breadth or width which is the latitude of the curriculum and the order of the contents and activities in a successive manner, they mislead both the teaching-learning process and finally cause failure of quality education (My own words).

The process of developing textbooks has two major aspects, preparation and production. The preparation aspect of textbooks development involves planning, writing, piloting and editing stages. The production aspect also involves designing, preparation of main plates, printing, binding and pricing (Lemma, 2007).

Content can simply be defined as the body of knowledge or a set of students activities contained in a textbook or in a course of study or which can only be considered as representative sample of all the knowledge that can be included in it in order to facilitate the learning experience (listening, observing, reading, writing, performing mathematical calculations, dramatizing, experimenting, researching, etc) (Amare, 2000).

Layout of a textbook refers to the way in which the materials such as words and pictures in the textbook are arranged. It is the design or arrangement of printed material such as the pages of a textbook, the art of designing printed material (Microsoft Encarta, 2007). Textbook's page layout refers to the adjustment of margins, text positions, illustration positions and the like, that are decided in the process of textbook design.

According to Microsoft Encarta dictionaries (2007), one of the possible meanings of the word organization is the effectiveness of the arrangement (configuration, design, format, composition, constitution, make-up, pattern, structure) of separate components in a coherent whole.

Gender is a concept that refers to the roles of girls, boys, women and men as defined by their society (Oyebola, 2007 and WNN, 2007). Therefore, a textbook is symbolic of school and modernity, a means for knowledge development. Thus, the issues of gender balance in textbook preparation have to be handled in the uses of words, illustrations, sentence constructions, activities and so on.

Regarding the importance of exercises in the process of teaching and learning, Taba (1967) pointed out that, teachers' manner of asking questions and approach providing learning exercises are by far the most influential teaching acts. In order to make questioning effective, questions should be clear and understandable, well organized and defined, reasonable, relevant and demanding for responses within the reach of the learners by emphasizing the contribution of exercises in developing critical thinking capacities of students.

Transmission of ideas and concepts may not be comprehensively clear to the reader, unless the writer makes use of different writing techniques and variety of illustrations. As traditional sayings and experience remind the importance of illustrations boldly, a single picture can better transmit message than a thousand of words. Tesfaye (2005) viewed that illustrations need to be thought as an integral part of the textbooks design and development processes and to be given the same degree of attention as the written words. Therefore, illustration devices are at times not only more informative and effective than pointed words but also break monotonous tension. Therefore, illustrations can assist the learning of a text; play significant role in understanding and visualizing concepts. Thus, appropriate illustrations need to be provided in textbooks.

# CHAPTER THREE

## Research Design and Methodology

This chapter is devoted to research design, methodology, data sources, sample and sampling technique, instrument of data collection, procedures of data collection, methods of data analysis, validity and reliability of data and ethical considerations. The detail of the current issues is presented hereunder.

### 3.1. Methods and Procedures

The method employed to evaluate level-I textbooks prepared for children of pastoral and semi pastoral areas of Somali region is content analysis in a qualitative approach. Interviews with regional curriculum department head and experts who have been involved in the preparation of the textbooks were also used as a supplementing procedure.

Content analysis is a systematic research technique for gathering and analyzing the content of texts whether the content is made up of words, phrases, sentences, pictures, symbols or ideas. Barelson cited in Amare (1998) explained that content analysis is a research technique for the objective, systematic and quantitative description of the manifest content of communication. The key terms defining and characterizing the method of content analysis can be further described as follows.

Objectivity refers to prevention from the influence of the opinion of the researcher or coder on the data collected. Objectivity is achieved through clear and precise definition of categories used in analysis, such that different persons may apply them to the same content and get the same result.

Quantitative means simply the recording of numerical values or the frequencies with which the various defined types of content occur. Manifest content means the apparent content, that is, the content must be coded as it appears rather than as the content analyst feels. If intent is analyzed, no matter how correct the interpretation is, the research will suffer from subjectivity; and systematic means categories are setup; all relevant contents are analyzed; and a set of procedures is applied in the same way to all contents being analyzed.

As Stempel III cited in Amare (1998) explained, content analysis can be considered as a formal system for doing something that we all do informally rather frequently, drawing conclusions from observations of content. As people, objects, vehicles, trees, and so on could be sources of information in survey designs, words, sentences, paragraphs, or entire texts could be the source of data in content analysis.

In similar approach, Lomax in Wube (1995) emphasized the diagnostic power of content analysis for its simplicity and directness. He stated that content analysis deals with frequent and easily identifiable qualities in behaviour that can be expressed in numerical terms and on which inter-rater consensus can be tasted.

Therefore, content analysis is an appropriate method to assess the textbooks mentioned. The students' textbooks prepared and printed in 1997 by the curriculum department of Somali Regional Education Bureau for level I learners of pastoral and semi-pastoral areas of Somali Region are the population for this study. These textbooks are four in number (Af-somali, English, Environmental Science and Mathematics). The evaluations of the four textbooks have been done by considering all of them as a whole.

### **3.2. Sources of Data**

All the textbooks of level-I (Af-somali, English, Mathematics and Environmental science student's textbooks) are studied. The data were gathered from these textbooks with the help of coding sheets prepared for this purpose. Relevant data about the textbooks' authors and procedural processes of evaluation of textbooks so far applied in the region were also obtained from curriculum development department of the region through document observation, discussions and interviews. These data helped the researcher to analyze and provide answers for the research questions. To perform the study, procedural steps were used to conduct content analysis as explained under.

### **3.3. Selection of Unit of Analysis, Categories and Coding Units**

Four methodological issues stand out in content analysis. These are: selection of unit of analysis, category construction, sampling of contents, and reliability of coding. As already mentioned in the previous section of this chapter, in content analysis, words, phrases, statements, paragraphs, or the entire article or book can serve as a unit of analysis. Based on this assumption, the whole textbooks were used as units of analyses.

The most important issues in content analysis are category formation and proper use of categories formed. As Amare (1998) argued, category formation has to give attention to three important points: category must be pertinent to the objectives of the study; categories should be functional; and categories must be manageable. Accordingly, six categories were developed and applied for this particular study. They are: scope and sequence, layout, objective-content association, illustrations, learning exercises and gender features categories. Referring to each category, coding units were designed, identified and applied as described in the manner below. The coding units were identified as follows:

- a. For the category of scope and sequence – appropriateness of the skills and content covered in one’s program of curriculum at each class level over a period of time in a particular order.
- b. For the category layout – font size, line spacing and page set up;
- c. For the category gender features – topics, illustrations and grammar parts;
- d. For the category objective-content association – checking and counting of objectives with respect to topics and subtopics, respectively, whether or not they are in harmony;
- e. For the category illustrations – counting of pictures, tables, maps and diagrams and checking whether they are related or not with the content they are presented for and followed by captions and explanations;
- f. For the category learning exercises – checking of availability of variety of different exercises /activities types and items in order to check whether or not they are promoting learning by doing or only memory.

### 3.4. Instruments of Data Collection Analysis Strategy

The next main emphasis of content analysis is the reliability of the coding process. The coding process affects the results of the study directly or the researcher is concerned with the following issues:

1. **Definition of key terms:** these definitions are revised and approved with some comments of the advisor and proposal assessor.
2. **The type of coding used:** The type of coding used in the coding process can also affect reliability. Among the three types of coding, descriptive coding was selected and used. The reason is that descriptive coding needs understanding of coding rules and it avoids the subjectivity of coders. The coder in this case simply records or tallies what he/she observed.

During the process of coding, coding sheets consisting of each item were produced and tallies were made, counted in each item case and changed to percentage terms where necessary. There were three different individual coders, all were given orientation and made to adopt the procedure through practical exercise made in doing the coding work of one of the textbooks, namely: mathematics, at the beginning and assigned to accomplish the coding processes of all the rest three textbooks under this study.

To make the coding process reliable, attention was paid to seriously conduct the process by the three coders. For instance, the coders were informed that there was one day training on how to conduct coding. On May 1<sup>st</sup>, 12 coders attended to a conducive classroom which is located at Jigjiga University at 8:00 in the morning. Each of the coders signed the morning shift of the attendance sheet; then note-books and pencils were distributed to each of the coders whereas ground rules related to the day's training were given. After that the training was inaugurated and continued up to the break-time. At half past ten o'clock, the coding trainees went out for refreshment and came back to the training room after thirty minutes. However, the coding training ended before noon whereas the trainees started coding practice in the afternoon by using their pencils appropriately.

Each of the textbooks was coded by all the four different coders independently and an average of the four coding results was considered for each item to finalize the result. In order to make the coding reliable, trial runs were made on one of the textbooks namely Mathematics level-I student textbook by the researcher and the coders. In addition to this theoretical framework was presented and discussions were made on the definition and rules governing the procedures before starting coding, such as on the approach employed to assure reliability of coding and the descriptive type of coding.

The issue of data analysis was done by summarizing the coded results. Layout formats were analyzed against the standards set by the Educational Materials Production and Distribution Agency (EMPDA) and attempts were made to analyze the rest in terms of literature review. Lastly the implications of the results were discussed as displayed in chapter four.

### **3.5. Validity and Reliability Checks**

The appropriate method of data collection was expected to bring the desired results in the final analysis. To assure the quality of the data, checking the validity and reliability of data collecting instruments before providing to the actual study subject was the core issue. Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure, but a measuring instrument is reliable if it provides consistent results (Charles, 1995).

To ensure validity of instruments, initially the instruments were developed by the researcher under close guidance of the advisors and, also a pilot study was carried out on 4 experts of Somali Regional Education Bureau Curriculum Development Department to pre-test the instrument. The pilot test is providing an advance opportunity for the investigator to check the coding sheets and to minimize errors due to improper design of instruments, such as problem of wording or sequence (Aams et al., 2007)

Regarding the reliability, as the coders were trained for one day on the principles, methods and steps of coding, practices were made by the coders regarding the points raised during the training. Furthermore, there were follow-ups to check and correct unnecessary errors on the right time. The additional interesting point is that both the coding sheets and the interview questions were translated into Somali language in order to create conducive understanding of

the tools and obtain the reliable data required. After that the total items were calculated by using percentage in order to know the actual consistency of the responses. As a result, the responses were found to be positive according to the coded items and interviews.

### **3.6. Ethical Considerations**

Creswell (2003) noted that to make the research process professional as the researcher anticipates data collectors, he should also have respect for the participants and sites for the research. Therefore, the researcher had communicated participants legally and smoothly. The purpose of the study was made clear and understandable for all participants. Any communication with the concerned bodies was accomplished at their voluntarily agreement without harming and threatening the personal and institutional wellbeing. The identity of the respondents was kept confidential by giving them codes instead of recording their names.

### **3.7. Chapter Summary**

The method employed to evaluate level-I textbooks prepared for children of pastoral and semi pastoral areas of Somali region is content analysis a qualitative approach. Interviews with regional curriculum department head and experts who have been involved in the preparation of the text books were used as a supplementing procedure.

As far as data resource is concerned, all the textbooks of level-I (Af-somali, English, Mathematics and Environmental science student's textbooks) are studied. The data were gathered from these textbooks with the help of coding sheets prepared for this purpose. Relevant data about the textbooks' authors and procedural processes of evaluation of textbooks so far applied in the region were also obtained from curriculum development department of the region through document observation, discussions and interviews.

Regarding the selection of unit of analysis, categories and coding units, the whole textbooks were used as units of analyses. Moreover, to assure the quality of the data, checking the validity and reliability of data collecting instruments before providing to the actual study subject was the core.

In accordance with the reliability, as the coders were trained for one day on the principles, methods and steps of coding, practices were made by the coders regarding the points raised during the training after that the degree of the expected result about the consistency of the data was secured.

Regarding the ethical considerations, the purpose of the study was made clear and understandable for all participants. Any communication with the concerned bodies was accomplished at their voluntarily agreement without harming and threatening the personal and institutional wellbeing and finally the identity of the respondents was kept confidential by giving them codes instead of recording their names.

## CHAPTER FOUR

### Data Presentation, Interpretation and Analysis

Content analysis, as mentioned earlier, is the method employed for this study. Interviews of Regional Education Bureau Curriculum Department head, experts of the department were used as a supplementing procedure.

#### 4.1. Profile of Textbooks' Authors under the Study

The skill development process of a given task accomplishment capacity can be obtained either through training or from experience. Training is the process of teaching someone to do a particular job or activity, the process of teaching or learning a skill or job. Experience is knowledge and skill gained through time spent doing a job or activity, through being involved in or exposed to something over a period of time (Microsoft Encarta: 2006). Therefore, the know-how and skill of developing children's learning materials require the capacity of doing which possibly will be based on training and experience.

Information about the authors of these textbooks was gathered from their personal files found in the Regional Education Bureau. Most of these textbooks are done by the teams of subject specialists. The maximum number of team members was 4. The information gathered regarding these textbooks' authors are shown in table 2.

**Table 2: Profile of the Textbooks' Authors**

Textbook	No of Members Of the Authors Team	Qualification			Experience in		
		MA/Msc	BA/Bsc	Diploma	Writing Textbooks	Teaching Primary School	Teaching Secondary School
Af-somali	2	-	2	-	2	1	1
English	3	-	3	-	3	2	1
Mathematics	2	-	2	-	2	1	1
Envt. Science	3	-	3	-	3	2	1
<b>Total</b>	10	-	10	-	10	6	4

According to table 1, ten of the Regional Education Bureau Curriculum Materials Development Experts were involved in the preparation of these textbooks. All of these experts have a minimum of two years' experience in working at the Curriculum Department of the Regional Education Bureau. Along these work experience, all of them have experiences of developing at least two different curriculum materials before being engaged in writing these textbooks. None of them was trained in MA/MSc and all are trained at first degree level. According to the interviewed textbooks' writers, 7 of them have an orientation of at least one week on how of textbooks preparation for primary school learners are conducted. Five of them have experiences in teaching at high schools and five of them have experience in teaching at primary schools. Each of the textbooks considered, except one, are written by a group of subject experts having at least two members.

As the department head and the experts interviewed explained (see appendix F), 7 of the writers of these textbooks have at least two short term trainings at regional and/or federal levels on the issues of curriculum materials development. In addition to these, 4 of them were trained for about two weeks by the International Institute of Capacity Building for Africa (IICBA-UNESCO) on an interactive curriculum materials development. Furthermore, based on the request these experts raised to the Regional Education Bureau and the Regional Commission for Pastoralist Areas Development of Somali Region, there was a visit to the pastoralist and semi-pastoralist areas of Somali region that was aimed at least to observe and understand different issues that help them in developing the expected learning materials with respect to the context of the learners situations.

By the time when these textbooks were prepared, as the current Regional Education Bureau Curriculum Department Head and the authors interviewed confirmed (see appendix F), there was no guideline or policy for the preparation and evaluation of textbooks neither at national nor regional levels by that time (1997 G.C). Currently, the curriculum department referred was using different formats prepared by the team of experts working at the department to collect data that are relevant for revision of the teaching-learning materials, after being approved by the department.

#### 4.1. Scope and Sequence of the Textbooks

The scope and sequence is a relatively comprehensive listing of the skills, strategies, concepts students need to internalize to become literate, successful readers, writers, and thinkers. Therefore, if textbooks lack course coverage, breadth or width which is the latitude of the curriculum and the order of the contents and activities in a successive manner, they mislead both the teaching–learning process and finally cause failure of quality education (My own words).

**Table 3: Scope and Sequence of the Textbooks**

Textbooks	No of Chapters /Units	No of Lessons	No of pages	Scope				Sequence
				Contents	Skills	Strategy	Time	Order
Af-Somali	4	65	67	Y	Y	X	Y	Y
English	16	110	134	X	Y	Y	X	X
Mathematics	8	109	110	X	Y	X	X	X
Envt. Science	5	23	96	Y	Y	Y	X	Y

Y = appropriate, X = not appropriate

As per the presentation of table 3, all of the textbooks considered are organized in chapters/units and the books are also organized into lessons with a minimum of 67 and maximum of 110 pages. The organizational parts that provide important information about the scope and sequence dealt within the textbooks include contents, skills, strategies, time and sequential parts. However, the investigation was made whether or not the textbooks are organized containing these provisions.

According to table 3, two of the textbooks considered (Af-somali and Environmental Science) are organized in chapters/units including the contents, skills, and order although the two books are different in terms of the strategy and time. For example, Af-somali textbook did not totally use any strategy. The environmental textbook also lacks appropriateness in terms of the allocated time for the course offering; for example, some of the topics in some of the lessons are too much for ABE level students to cover within the allocated time.

The other two books (English and Mathematics) are neither organized in chapters nor lessons. Their skills, strategies, time and order themselves are not appropriate to the level of ABE students. For instance, English textbook consists of sixteen chapters and one hundred and ten lessons whereas the mathematics textbook consists of eight chapters and one hundred and nine lessons which are too difficult to cover for both ABE pastoral and semi pastoral students and ABE teachers. Moreover, both English and Mathematics textbooks lack sequential appropriateness; for instance, there are some complex lessons preceded by some simple and pre-requisite lessons.

In addition to this the level of some of the lessons are too high for ABE pastoral and semi pastoral students to learn. For instance, lessons in chapter eight of mathematics textbook are about geometry which starts from the second cycle of primary classes and extends up to the secondary school levels.

#### 4.2. Layout of the Textbooks

As mentioned in chapter 2 section 2.2, textbooks are communication devices. Therefore, textbooks need to have appropriate layouts to promote effective communication as they are prepared for children of different maturity levels and backgrounds (Hartley,1978). Consequently, textbook layout needs to address all the differences that are attributed to the users corresponding ages and maturity levels.

As an essential part of layout of a textbook, organization of contents also need to be arranged into suitable units/chapters and sections (Aggrawal, 1996). The following table shows the organization of these textbooks into different parts and its typographical layouts.

**Table 4: Organization of Contents of the Textbooks**

Textbook	No of Chapters /Units	No of Lessons	Accessibility of the Textbooks Selected Parts							
			No of pages	Title page	Table of Contents	Headings	Introduction	Summary	Glossary	Reference
Af-Somali	4	65	67	Y	X	Y	X	X	X	X
English	16	110	134	Y	X	Y	X	X	X	X
Mathematics	8	109	110	Y	X	Y	X	X	X	X
Envt. Science	5	23	96	Y	Y	Y	X	X	X	X

*Y = accessible, X = not accessible*

As displayed by table 4, all of the textbooks considered are organized in chapters/units and again all of them are also organized into lessons with a minimum of 67 and maximum of 110 pages. The organizational parts that provide important information about the contents dealt within the textbooks include title page, table of contents, headings, introductions, summaries, glossaries and reference parts. The investigation was made whether or not the textbooks are organized containing these provisions. As displayed by table 4, all the textbooks under study have title pages and headings. Title pages, as Aggrawal (1996) underlined, are one of the important parts of a textbook that provides title of the textbook, author's/ authors' name/names, publishers' names, place of publication, year of publication and the like. Table of contents is also important for that it provides a list of contents and other parts of the textbook with the corresponding page. It helps the reader to easily detect about where each of the contents is found within the textbook; accordingly, 2 of these textbooks have table of contents while the rest 2 do not contain.

One of the other important elements in the analysis of textbook layout is the introduction part. It is that part of a textbook, which provides a clear picture of contents organized in and provided by textbook. As Hartley (1978) elaborated, this part is expected to introduce the organization method and the purpose of the book, how it should be used, and what is expected of the learners or readers. As displayed by table 4, all these textbooks have no introduction at all. All of them directly start dealing with the main body of the content step by step without giving any information on the way the textbook is organized and the like. This shows that these textbooks lack devices that introduce the material and orientation to use and arouse the interests of the learners in motivating to learn from the textbooks.

Summaries are good means in highlighting the essence of the content part under discussion. They are review of chapter or lessons that provide the highlights of the issues being discussed. They can be placed either at the beginning or at the end of the chapter/unit or lesson. Summaries provided at the beginning or end of chapters or lessons, as Hartley (1978) argued, can assist the learner rearrange and organize his/her learning. They can help the learner informing the points of attention and emphasis for what is to come and/or help the learner to restate the main points made in the discussion or presentation made. However, all of these textbooks have no summaries as indicated by table 4. This indicates that these books lack one of the elements that increase the degree of their appropriateness.

Contents in a textbook, normally, appear with the introduction and utilization of a number of technical terms pertinent to subject matter at hand. The utilization of such technical terms may be much bolder in the beginner language as a medium of instruction quite like Af-somali which is one of the languages that were becoming the medium of instruction in elementary school (1-8) particularly in Somali Regional State since 1994 (MOE, 1994). It is unfair to assume that all teachers and students are familiar with such terms.

With this assumption, textbooks are expected to provide the meaning of such technical terms in the forms of glossaries in explaining them through the language in use as a medium of instruction or in a language that both students and teachers can communicate. In the course of the provision of such a facility (glossary) can help the users of the textbook easily understand the new terms and so it can be considered as one of the elements contributing to the appropriateness of the textbooks.

Regarding the issue of glossary, as shown in table 4, none of these textbooks provided glossary. The question of provision of this facility may be tougher with regard to the subjects such as Mathematics and Environmental Science as Environmental Science is an integration of different discipline areas with full of both natural and social science terminologies. Mathematics is also a subject with new medium of instruction (Af-somali) as it is also full of technical and subject oriented terms demanding the provision of glossary.

References are important for teachers in particular to have more information and explanation of the content considered. References help to search for different theories, principles and actions related to the content at hand. With this regard, no textbook under this study provided references.

Regarding the issues of layout of a textbook, the other important aspect is typographical setup, which includes page setups, font size and line spacing. These issues need to meet the reading experience that the users of the textbooks have and their maturity level. The following table 4 presents the conditions of the textbooks' typographical layouts under this study regarding page setups, font sizes and line spacing. All the textbooks considered are of A4 sizes. The size of the textbooks was deliberately made so, as the Regional Curriculum Department Head and the authors of the textbooks interviewed highlighted, because of its convenience for the beginners.

A4 is recommended, as the authors interviewed explained (see appendix F), particularly for beginner children because of its suitability for writing letters and illustrations in higher font sizes. The guideline provided by EMPDA regarding the size of learning materials for children of beginning stages recommends also A4 sizes.

**Table 5: Typographic Layout of Textbooks**

Textbooks	Page Set up				Font Size			Spacing		
	Left Margin	Right Margin	Top Margin	Bottom Margin	Topic	Subtopic	Text	Between Topic and Content	Between paragraphs	Text
Af-somali	2.0	1.5	2.0	2.0	14,16	14	13-14	2	2	2
English	2.5	1.5	2.5	2.0	16,18	14	13-14	2	2	2
Mathematics	2.5	1.5	2.5	2.0	16,18	14	13-14	2	2	2
Envt. science	2.0	1.5	2.5	2.5	14,16	14	13-14	2	2	2
Standard met	50	100	25	25	N.S	N.S	100	100	100	100

N.S. = No standard

Even though the standard set by EMPDA (see appendix A) regarding page setups recommends 2.5cm for left and bottom margins, 1.5cm for right margin and 2.0 for top margin of textbooks, Af-somali and Environmental Science textbooks found having their left margins 2.0cm. Similarly, the top margins of English, Mathematics as well as Environmental Science textbooks and the bottom margins of English, Mathematics and Af-somali textbooks show slight difference ( $\pm 0.5$ cm) with respect to the standard referred. Moreover no justification was provided for this inconsistency.

The font size of the text meet the standard set for this level of learners by the agency referred above, EMPDA. As the authors of these textbooks confirmed regarding the font sizes used to develop the contents of these textbooks, the recommendations of EMPDA is appropriate and it was the one applied in writing textbook to formal schools.

The line spacing between topics and contents as well as between paragraphs and text are uniform throughout all the textbooks considered and meet the standard referred. The convenience and consistency regarding interline spacing reduce the danger of optical bridging between lines. Regarding the importance of line spacing and spaces between words and paragraphs, Hartley (1978:22) argued that, “the opening out of line to create a clear difference between the inter-linear gap and the word spacing is common practice when simplicity of reading is required. In this way the danger of optical bridging between lines is reduced”.

### **4.3. Objective–Content Association**

Contents are determined by and derived from already set objectives. The instructional processes are also guided by their respective objectives. Objectives show the directions of the instructional processes. As attempts made to discuss on this issue in the subsection 2.2.2 of chapter two reveals, the contents that were dealt within the textbooks are the means used to materialize the objectives, because behavioral objectives are indispensable tools in an instructional process. This in turn implies the necessity and importance of the associations that each component of instructional process need to have with its respective behavioral objectives. That is to say, each topic/content in the textbooks must be associated to or related with the set objectives.

In order to test the existing associations between the objective documented in the syllabi and the topics/contents in each textbook, records based on relations have been made in the form of coding, i.e. critical observations of the contents of the textbooks were made against the corresponding objectives and decided whether the contents are fully related, partially related or not related totally to the objectives. Table 5 presents the conditions of the contents in the textbook with respect to the objectives set for them.

**Table 6: Conditions of Objective–Content Association**

Textbooks	No of Contents Topics or Subtopics	Degree of association					
		Fully Related		Partially		Not related	
		No	%	No	%	No	%
Af-somali	37	37	100	-	-	-	-
English	22	22	100	-	-	-	-
Mathematics	25	25	100	-	-	-	-
Environmental science	22	22	100	-	-	-	-

Table 6 depicts that the contents of all the textbooks under study are fully related to the set objectives. This indicates that the respective syllabi were fairly used in developing the corresponding students’ textbooks. These can be also considered as indicators in evaluating the system and which elements of learning were focused on in the process. Therefore, the objective-content agreement is maintained and contents are in harmony with objectives set in their respective syllabi.

Regarding the contents dealt within the textbooks under the study, the authors and the Curriculum Department Head of the Regional Education Bureau confirmed that the contents adjusted in levels I, II and III for children learning at ABE centers of pastoralist and semi-pastoralist areas are identical with contents set for students of formal schools learning in grades 1, 2, 3 and 4. However, the approach employed in treating the contents in the textbooks studied is different from those prepared for grades (1 – 4) learners at formal schools. The adjustment of the contents into three levels in all the four subjects is the other difference.

In addition to this the issues of quality, relevance and standard of the contents require other investigation and that is beyond the scope of this study.

#### **4.4. Illustrations**

Illustrations are important tools for the elaboration of contents. They provide information more clearly than words can do by showing exact situations of things under focus. In order to meet their purpose, illustrations in the textbooks should be related with contents/topics. Captions, labels and identification numbers with this regard, are useful to address and assist to identify the contents of the illustration.

For the purpose of assessing the conditions of illustrations in these textbooks with respect to the qualities mentioned above, an investigation was made. Each illustration, picture, diagram, table, graph or map presented in the textbooks was analyzed in terms of its relation to the respective content, whether it is followed by caption or not, whether it is labeled, given identification number or not was checked in the coding process and the data gathered are presented by table 6 below.

**Table 7: Conditions of Illustrations in the Textbooks**

Textbooks	Total no of illustration	No of illustrations		No of illustrations with captions or labels	No of Illustrations Without captions or labels
		Related to the content	Not related to the content		
Af-somali	292	292	-	292	-
English	319	319	-	119	200
Mathematics	296	296	-	296	-
Envt. Science	09	309	-	292	17
<b>Total</b>	<b>1216</b>	<b>1216</b>	-	<b>881(72.5%)</b>	<b>335 (27.5%)</b>

According to table 7, all the pictures, diagrams, tables, graphs and maps existing in the textbooks as illustrations have direct relations with the contents they are presented in. 335 (27.5%) of these illustrations are not accessible with captions, have no labels or identification numbers. This indicates that these illustrations lack the power to explain themselves easily concerning the purpose they are expected to perform. Illustrations of contents are likely to be remembered more readily than their names, but presenting captions with illustrations (such as pictures, diagrams maps, etc) help the subsequent recall of the caption (Hartley, 1978).

Labeling of illustrations also aids to classify and helps to recall them for a long time easily. Labeling is one of the methods of clarifying the parts of illustration used to explain the required content. If parts are not appropriately labeled the whole-part or part-whole learning leads to ambiguity. As a result, such conditions lead to easily forget the concept treated and presented. As presented by table 5, 881 (72.5%) of the illustrations presented in these textbooks have captions, labeled and given identification numbers. In particular, Af-somali textbook

additionally used arrows to specify parts of some of the illustrations to be emphasized with respect to the content in concern. Textbooks of the subjects like mathematics and environmental science also used bold marks across the illustrations in addition to identification numbers, labels and captions to identify the parts that are at the focus of attention with respect to the content it refers to.

As to the data presented by table 7, significant proportion 200 (63%) of illustrations of English textbook and 17(5%) of the illustrations found in Environmental Science textbooks for level I have difficulty in providing convenient identification mechanism of the presented illustrations such as captions or labels indicating that there is inappropriateness of the textbooks mentioned with this regard.

#### **4.5. Learning Exercises**

The other aspect to be considered in the development of learning materials in general and student's textbooks in particular is the issues of exercises. The availability and distribution of variety of exercises with a textbook needs due attention with respect to the outcome expected of the learners. Learning exercises include different learning activities that are oriented towards instructional objectives. Learning exercises also serve as self-evaluation mechanisms for the learner along the pre-set instructional objectives expected to be achieved by using the textbook as one of the learning tools. The appropriateness and qualities of learning exercises can be seen in line with the availability, distribution, suitability for enhancing creative thinking and reasoning, its appropriateness in minimizing memorizations and providing opportunity for learners to organize and forward their thoughts, and so on.

In other words, textbooks are assumed to provide such mechanisms that encourage student knowledge, attitude and skill development. To accomplish such mission, evaluation mechanisms have to be designed and have to support students to solve problems independently or with certain levels of guidance. To this end, exercises/activities can be considered as one of the tools that assist the learning process if properly presented and used.

Students differ in their competence, aptitude, interest, motives, personality traits, preferences, self-efficacy, and the way they construct meaning out of learning (Yalew: 2004). Accordingly, textbooks are expected to assume in their presentation of contents to address these differences among learners in order to support their learning activities. As practical experiences reveal, a mere sharing or transmission of knowledge from the teacher to the students does not ensure and facilitate learning. Learning is meaningful to the learner when he/she actively participates in the learning process. Exercises/activities are one of the tools which aid and enhance the participation of learners.

To assess the conditions of learning exercises/activities in the textbooks under study, the total number of exercises/activities with respect to the type they can be categorized in was counted with respect to chapters/lessons and registered.

It is worth mentioning at this point that, the textbooks under study are prepared as self-directing and interactive learning materials. These materials require limited level of guidance and assistance. These assistances and guidance are designed to be provided by non-professional teachers named as “learning facilitators” or simply “facilitators”. These facilitators were already given short terms in-service trainings and orientations on how to make use of the textbooks and related matters such as issues related with classroom management (MoE:1996).

With this view, the contents in the textbooks are treated as activity oriented learners’ tasks such as different sorts of exercises that require and lead to observations, discussions, asking members of their respective families and then reporting, making visits and reporting, and so on. Table 8 explains the distribution, variety, and total number of learning exercises provided in each of these textbooks.

**Table 8: Type and Distribution of Learning Exercises**

Textbooks	Total no of Exercises/Activities	Type and Number of Activities/Exercises								
		Objective Type					Subjective Type			
		True/False	Multiple Choice	Matching	Completion	Short Answer	Performing and Reporting	Observing Asking Others,	Discussing and Reporting	
Af-somali	878	---	----	---	--	12	864	2	-	
English	98	---	----	----	--	1	94	-	3	
Mathematic	211	25	----	---	44	31	78	21	12	
Envt. Science	133	-	--	---		32	38	11	52	
Total	1320	25		--	44	76	1074	34	67	
		<b>145 (11%)</b>					<b>1175 (89%)</b>			

\* Items of the following type: a) What is the number of members of your family?

b) How old are you? c) What is your mother's name?

As shown in table 8, 145 (11%) of the exercises/activities are distributed through objective types and the rest 1175 (89%) are distributed through subjective type. Out of the subjective type exercises/activities about 1074 (81.4%) of the total exercises/activities are items that require performing or accomplishing of the given tasks and reporting to the facilitator directly or indirectly through the group after discussing on the points by their respective groups organized for the purpose of accomplishing such learning activities. These tasks (exercises/activities) include those engaging students in writing or reading of letters, forming words and reading them, constructing words or short sentences and writing them as in language subjects, Af-somali and English. Similarly, in Mathematics, reading/writing numerals, performing any of the four elementary algebraic operations, etc. and then reporting directly or through the group to the facilitator for further comments and assistance are the focus of the exercises/activities provided with these textbooks.

The rest of the items focus on visiting, observing, asking others and discussing with classmates and reporting to the facilitator about the issue assigned. Exercises/activities set in the Environmental Science textbook are also running similar fashion.

This indicates that exercises/activities provided by these textbooks are adjusted to enhance and promote activity oriented and learner-centered approaches of teaching-learning. In general, learning exercises in the textbooks contained a variety of types in which the larger portions of them promote learning by doing.

#### 4.6. Gender Balance

Education is culture sensitive. Cultural values can highly influence educational activities. Textbooks are one of the major channels of transmitting the cultural experiences and traditional practices existing in the society. With this view, textbooks are supposed of gender stereotype of reflection through grammar usage, pictorial representations or activity assignments.

In order to study the conditions of gender images reflected in the textbooks under the study, grammar parts; illustrations (pictures, diagrams, tables and maps) and activities related to gender were analyzed individually. In this case, all the four textbooks were investigated separately. Tables 9, 10, 11, 12, 13, 14, 15, and 16 present the data collected and organized regarding gender issues reflected in each textbook followed by the analyses and discussions of the data.

**Table 9: Gender Images in Mathematics Textbook**

Character	Total number	Gender					
		Male referenced		Female referenced		Common*	
		No	%	No	%	No	%
Gender Referenced Topics	7	-	-	-	-	7	100
Proper Nouns	14	8	57	6	43	-	-
Pronouns	38	15	39	14	37	9	24
Common Nouns	98	40	41	42	43	16	16
Adjectives	25	12	48	13	52	-	-
<b>Total</b>	<b>18</b>	<b>75</b>	<b>41</b>	<b>75</b>	<b>41</b>	<b>32</b>	<b>18</b>

\* Topics or contents that are addressing both sexes without identifying one or the other.

As table 9 depicts regarding Mathematics textbook, the gender balance is maintained in the use of topics. But 8 (57%) of the proper nouns and 15 (39%) of the pronouns reflect male features while 6 (43%) of the proper nouns and 14 (67%) of the pronouns reflect female features. The result with respect \*to the uses of proper nouns and pronouns show that gender balance is not maintained, even though the difference is minimal in this case. Similarly, those parts of grammar

in favor of female features are 42 (43%) in the use of common nouns like teacher, doctor, etc. and 13 (52%) in the uses of adjectives while 40 (41%) of the common nouns and 12 (48%) the adjectives favor male features. These also indicate that, however the difference is minimal in percentage terms, there is gender bias. In general, gender balance is not maintained in this textbook regarding usage of grammar parts.

Pictorial representations of contents can reflect and communicate with different gender images. Table 10 shows the images of gender features reflected by pictorial representations used in Mathematics textbook.

**Table10: Images of Gender Reflected by Pictorial Representations in Mathematics Textbook**

Total No of Pictures	Gender Referenced		Female Dominated*	Male Dominated	Balanced	Not Gender Referenced **
	F	M				
296	1	2	5	2	10	276

*From a group formed by mixing up both sex features, the number of female features' representation is greater than the number of those representing male features \*\*pictorial representations (pictures, diagrams, graphs) that have no gender references.*

The table shows that, from the total of 296(100%) pictorial representations (pictures, diagrams, and graphs) in the textbook mentioned, only 20 (7%) of them are referring gender. The rest, 276 (93 %) are not referring gender features. Among those referring gender, 6 (30%) of them favour female features, 4 (20%) of them favour male features and the rest 10 (50%) reflect both female and male images in balanced manner. This indicates that, in this case also, female features are slightly favoured implying that there is a gender bias.

The next textbook to be assessed with respect to the gender images reflected in is Af-somali. The following table11 deals with topics and grammar parts in the textbook with respect to gender images.

**Table 11: Gender Images in Topics and Grammar Parts of Af-somali Textbook**

Character	Total number	Gender					
		Male referenced		Female referenced		Common	
		No	%	No	%	No	%
Gender Referenced topics	37	-	-	-	-	37	100
Proper Nouns	25	17	68	8	32	-	-
Pronouns	9	1	11	-	-	8	89
Common Nouns	139	2	1	2	1.5	135	97
Adjectives	-	-	-	-	-	-	-
<b>Total</b>	<b>210</b>	<b>20</b>	<b>9</b>	<b>10</b>	<b>5</b>	<b>180</b>	<b>86</b>

According to table 11, gender bias is not reflected in presenting topics regarding Af-somali textbook. But, 20 (9%) of the grammar parts of the textbook reflect male features while 10 (5%) of them reflect female features and 180 (86%) reflect common features of both sexes. Detailed parts of grammar in favor of male features are 17 (68%) and 1(11%) in proper nouns and pronouns respectively, and those in favor of females are common nouns 2 (1.5%). The result shows that there is minor difference between males and females features in the uses of proper nouns, pronouns and common nouns. This indicates that gender balance is not maintained in this case.

The following table 12 shows gender images reflected by pictorial representations used in Af-somali textbook.

**Table 12: Gender Images in Pictures of Af-somali Textbook**

Total No of Pictures	Gender Referenced		Female Dominated	Male Dominated	Balanced	Not Gender Referenced
	M	F				
292	23	35	7	21	24	182

According to table 12, among the total of 292 pictures used in Af-somali textbook, 110 (38%) of them reflect gender and 182 (62%) of them are not associated with gender. Among those associated with gender, 44 (40%) of them favor male features, 42 (38%) of them favor female features and 24 (22%) of them are reflecting balanced gender images. This indicates that gender balance is not maintained in pictorial representations used in Af-somali textbook.

Regarding gender balance issues reflected in the Environmental Science textbook under this study, similar investigation was carried out. Table13 summarizes topics and usage of grammar parts with respect to gender images reflected in this textbook.

**Table 13: Images of Gender in Topics and usage of Grammar Parts of Environmental Science Book**

Character	Total number	Gender					
		Male referenced		Female referenced		Common	
		No	%	No	%	No	%
Gender Referenced topics	8	-	-	-	-	8	100
Proper Nouns	12	7	58	5	42	-	-
Pronouns	37	21	57	5	13	11	30
Common Nouns	4	4	100	-	-	-	-
Adjectives	205	27	13	4	2	174	85
<b>Total</b>	266	59	22	14	5	193	73

As Table 13 depicts, the topics in the text book are gender balanced. But about 59 (22%) of the grammar parts favour male features, while about 14 (5%) of them favour female features, and 193 (73%) of them reflect balanced gender features. Parts of grammar in favour of male features are 58%, 57 and 100% in proper nouns, pronouns and common nouns, respectively. The result indicates that gender balance is not maintained in this case.

Regarding pictures in environmental science textbook, the data obtained is displayed as shown in the following table.

**Table 14: Gender Pictures in Environmental Science Textbook**

Total No of Pictures	Gender Referenced		Female Dominated	Male Dominated	Balanced	Not Gender Referenced
	M	F				
302	78	52	9	6	12	145

As displayed by table 14, among the 302 pictures used in Environmental Science textbook, 145 (48%) of them are not referring gender features. Out of the gender referenced pictorial representations used in this textbook, 78 (26%) of them favour male features and 52 (17%) of

them favoured female features. Among groups of pictorial representations 6 (22%) of them are female features dominated, 9 (30 %) are male dominated and the rest 12 (44 %) are reflecting gender features in a balanced manner. This shows that gender balance is not maintained in this case also; i.e. male features are favoured in pictorial representations used in this textbook.

Assessment processes were also performed to evaluate the conditions of gender images reflected in English textbook, which was named by the authors of the book as “English learning guide”. Table 15 shows topics and grammar parts of the textbook with respect to gender images reflected in it.

**Table 15: Images of Gender in English Textbook**

Character	Total number	Gender					
		Male referenced		Female referenced		Common	
		No	%	No	%	No	%
Gender Referenced Topics	20	-	-	-	-	20	100
Proper Nouns	29	12	41	17	59		
Pronouns	162	18	11	35	22	109	67
Common Nouns	26	8	31	8	31	10	38
Adjective	32	12	37	16	50	4	13
<b>Total</b>	<b>269</b>	<b>50</b>	<b>19</b>	<b>76</b>	<b>28</b>	<b>143</b>	<b>53</b>

According to table 15, the topics in the textbook are maintaining gender balance. Regarding the grammar parts 76 (28%) of them favored female features while 50 (19%) of them reflect male features and 143 (53%) of them reflect balanced gender features parts of grammar in favour of female features are 59%, 22% and 50% in proper nouns, pronouns and adjectives respectively.

The result shows difference between male and female features in the uses of proper nouns, pronouns and adjectives. This indicates that female features are favoured than male features. Hence, gender balance is not maintained.

Regarding pictures in relation to gender reflections found in English textbook, table 16 shows the data collected and organized.

**Table 16: Conditions of Pictures in English Textbook with Respect to Gender**

Total no of pictures		Gender Referenced		Female Dominated	Male Dominated	Balanced	Not Gender Referenced
		M	F				
310		59	62	11	18	64	105
%	100	28	29	5	8	30	34

According to table 14, significant numbers of pictures 105 (34%) of them are not gender referenced. But among the rest those referring gender, 77 (36%) of the pictures favor male features, 73 (34%) of them reflect female features, and 64 (30%) of them reflect both features in balanced manner. This shows that gender balance is not fully maintained in the use of pictures and male features are favored in the textbook.

#### **4.7 Chapter Four Summary**

Information about the authors of these textbooks was gathered from their personal files found in the Regional Education Bureau. Most of these textbooks are done by the teams of subject specialists. The maximum number of team members was 4.

Regarding the scope and sequence of the books under study, all of the books are poorly prepared in general whereas two of the textbooks (English and Mathematics textbooks) have critical weak points according to the level of the ABE pastoral and semi pastoral students. For example, the scope of some of the lessons is too high for ABE pastoral and semi pastoral students to learn. For instance, lessons in chapter eight of mathematics textbook are about geometry which starts from the second cycle of primary classes and extends up to the secondary school levels.

Textbook layout needs to address all the differences that are attributed to the users corresponding ages and maturity levels. As an essential part of layout of a textbook, organization of contents also need to be arranged into suitable units/chapters and sections (Aggrawal, 1996).

According to the data presentation, interpretation and analysis, ten of the Regional Education Bureau Curriculum Materials Development Experts were involved in the preparation of these textbooks. All of these experts have a minimum of two years' experience in working at the

Curriculum Department of the Regional Education Bureau. Along these work experience, all of them have experiences of developing at least two different curriculum materials before being engaged in writing these textbooks. None of them was trained in MA/MSc and 10 are trained at first degree level. According to the interviewed textbooks' writers, 7 of them have an orientation of at least one week on how of textbooks preparation for primary school learners are conducted. Five of them have experiences in teaching at high schools and 5 of them have experience in teaching at primary schools.

To sum up, each of the textbooks considered, except one, are written by a group of subject experts having at least two members.

# CHAPTER FIVE

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### 5.1. Summary of the Study

According to the data presentation, interpretation and analyses in chapter four of this thesis, with the context of the basic and explicit research questions presented in the first chapter, the following findings are achieved:

1. In accordance with the Scope and sequence, the whole textbooks showed that both scope and sequence are poor because the contents which are covered at each class level over a period of time are either less than the amount allocated for the students or more than their capacity whereas the order is not sequentially arranged. Hence, this indicates the scope and sequence inappropriateness which exists among all the textbooks in general and English and mathematics textbooks in particular.
2. The findings for the question that ask about layout of the textbooks showed that two of the textbooks are organized without having content pages, all of them have no introduction, summaries, references and glossaries.
3. Regarding the typographic layout, the font sizes of the texts meet the standards set by the enterprise referred above. The interline spacing and spaces between text and the font size of the topics and the text are all in line with standards set for this level by EMPDA. Even though the difference is slight ( $\pm 0.5\text{cm}$ ), the page setup of the textbooks considered are not consistent with the recommendations provided by EMPDA.
4. The result of the study shows that all the contents are fully related with the objectives set in their respective syllabi.
5. It was found that the illustrations presented in the textbooks are related to the contents they are presented for respectively. The appropriateness of the illustrations was investigated in relation to their clarity by categorizing them with or without captions or labels. Accordingly, 881 (72%) of the illustrations are having captions or labels and the rest, 335 (28%) of them are without captions or labels. This investigation revealed that the illustrations are in harmony with the contents but not made clear in a uniform manner by using describing features such as captions, labels or identifications.

6. Learning exercises provided in the textbooks were analyzed in terms of objective and subjective (essay) type. Accordingly, 1175 (89%) of the exercises or activities are subjective type whereas the rest 145 (11%) of them comprises objective type. Under each category, the provisions of variety of subjective (essay) category are tasks such as performing and reporting, observing, asking others or visiting and reporting, discussing on the issue given and reporting.
7. a). Investigation was made in terms of gender related topics, usage of grammar parts, usage of illustrations or pictorial representations and activities. The result shows that regarding mathematics textbook, male features are slightly favored in the usage of proper nouns and pronouns and female features are favored in the usage of common nouns and adjectives. Additionally, female features are favored in pictorial representations in mathematics textbook. Therefore, gender balance is not maintained throughout the mathematics textbook.
- b. In Af-somali textbook, male features are slightly favored than female features in the usage of grammar parts and female features are slightly favored in pictorial representations.
- c. Male features are to some extent favored in the usage of grammar parts and pictorial representation in environmental science textbook.
- d. With regard to English textbook, the result shows that female features are favored in the usage of grammar parts and male features are slightly favored in the pictorial representations of gender images. In fact, in all the textbooks studied, gender balance is maintained with respect to topics descriptions.
8. Additionally, even though it is not the focus of this study, it is important that words are vital tools to transmit message in a textbook. Therefore, fair use of words can be made true if they are correctly spelled and used wisely. Spelling errors lead to unnecessary mistakes and misconceptions. In view of this, chapter 2 on page 47, 49 of environmental textbook instead of "... dabiiciga", it was phrased as "Daabiciga", "... carrada" it was phrased as "caaracla", "...nadaafadda", it was phrased as " ..... nadaatada" where the meaning totally disappears, a similar case is also in mathematical and Af-somali textbooks. Such errors also augment the inappropriateness of the textbooks.

9. In addition to this observation, the data gathered from interview made with some of the textbook writers also verify that all the textbooks are not edited by separate professionals other than the textbooks writers themselves.

## **5.2. Conclusions**

In schools and classrooms, textbooks may be considered as components of a curriculum. Therefore, textbooks can be considered as a key tool in the process of teaching–learning, especially in developing communities where profession of learning facilities is low. In the case of ours, regarding the environment where usage of languages as media of instruction is at their beginning stage, one of the best resources that students may have at hand to help them learning is the textbooks in addition to their teachers'/facilitators' guidance. In these cases, we can cite as an example, an elementary school student who is at the remotest area of the country, and who may or may not have a chance to communicate with no one for the purpose of his/her learning except his/her teacher and his/her textbooks. Therefore, maintaining the quality of textbooks as indispensable instructional materials is imperative.

In this study, it was not possible to analyze all textbook qualities except evaluating the conditions of scope and sequence, layout, appropriateness and clarity of illustrations, appropriateness of exercises to enhance learning by doing, objective–content association, and the nature of gender balance.

Based on these issues, the conditions of level I alternative basic education textbooks meant for children of pastoralist and semi-pastoralist areas of Somali region are evaluated against sub-categories developed by the researcher and some standards developed by other scholars.

According to the discussions made and findings obtained, it can be concluded that:

1. The authors of these textbooks have, relatively, relevant experience and training in developing textbooks for basic education learners. However, the formation of team of subject experts was inconvenient, regarding some of the subjects in particular mathematics, where a single expert was assigned to accomplish the task of writing and editing the same textbook.
2. The font sizes and spacing of the textbooks are found to be appropriate to ABE level I learners. But typographic layouts such as page setups are inappropriate regarding to the standard set.

3. Some of the words are found spelt incorrectly, showing that these textbooks are not edited by separate professional (s) other than the writers themselves.
4. The topics or contents throughout the textbooks are in harmony with the objectives set in the individual subjects' syllabi respectively.
5. Even though the difference is minimal and there are encouraging attempts, gender balance is not maintained throughout the textbooks.
6. The illustrations in the textbooks are in harmony with the contents they are meant for respectively although some of them lack clarity.
7. Learning exercise are found being appropriate in promoting activity oriented approaches of learning.

### **5.3 Recommendations**

Based on the findings and conclusions drawn and explained in the preceding sections, the following recommendations are forwarded in order to bring to the attentions of those who are concerned with activities of preparation and provision of learning textbooks.

- a. For the purpose of writing curriculum materials, the setup of teams whose members include curriculum experts, subject experts, practicing teachers, graphic designers and so on is recommended. Editing manuscripts by separate professionals other than textbook writer (s) can positively contribute to the quality of the textbooks.
- b. Textbooks need to be revised periodically (i.e. maximum once in five years) based on further and comprehensive study including the other aspects of textbooks' quality.
- c. The preparation of textbooks is complex process, which requires careful planning in order to come up with the textbooks those fitting the needs. One of these is equal treatments of both sexes. Therefore, the issue of gender balance needs to get due attention in preparation of textbooks.
- d. The issues of textbook writing, textbooks quality evaluations and approval, research on textbooks, copyright and similar matters require setting standards. Therefore, the formulation of textbook policy concentrating on these and similar textbooks issues either at federal or regional level is essential.
- e. As there is a capacity to publish books locally, the task of preparing and publishing textbooks need to be left for publishers' in line with the principles of free market economy.

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## List of Appendices

### Appendix A:

### EMPDA STANDARD TEXTBOOKS SIZES

#### Size A4

21cm x 29.7 cm

Borders:

Top ----- 2.00 cm

Bottom --- 2.50 cm

Left ----- 2.50 cm

Right ----- 1.50 cm

Text area

24.5 cm x 17.5 cm

#### Size A5

14.8cm x 21 cm

Borders:

Top ----- 1.50 cm

Bottom --- 2.00 cm

Left ----- 2.50 cm

Right ----- 1.50 cm

Text area

12cm x 17.5 cm

#### Size B5

17cm x 24 cm

Borders:

Top ----- 1.50 cm

Bottom --- 2.00 cm

Left ----- 2.50 cm

Right ----- 1.50 cm

Text area

12.5 cm x 2.0 cm

#### Recommended Body Text Point Sizes for Different Ages of Children

Grade	Age	Types of Point Sizes With Point Leading	
		Amharic	Latin
Kindergarten	3 – 6	22 – 24 – 30 plus 4 point leading	20 – 24 – 36 plus 4 point leading
1 – 2	7 – 8	14 – 16 – 18	14 – 16
3 – 4	9 – 10	14 – 16 plus 2 point leading	12 – 13 – 14 plus 2 point leading
5 – 8	11 – 14	12 – 13 plus 2 point leading	12 plus 2 point leading
9 – 12	15 – 18	12 plus 2 point leading	12 plus 2 point leading

**Source: EMPDA (Educational Materials Production and Distribution Agency)**

## Appendix B

### List of Alternative Basic Education Textbooks Prepared for Children of Pastoralist and Semi Pastoralist Areas of Somali Regional State

S.No	Identification of the Book	Year of Publication ( E.C)
1.	Af-somali Level-I Student Text	1997
2.	Af-somali Level-II Student Text	1999
3.	Af-somali Level-III Student Text	1999
4.	Af-somali Level-I Facilitators Guide	1997
5.	Af-somali Level-II Facilitators Guide	1999
6.	Af-somali Level-III Facilitators Guide	1999
7.	Af-somali Level- I Syllabus	1997
8.	Af-somali Level- II Syllabus	1999
9.	Af-somali Level- III Syllabus	1999
10.	English Level-I Learning Guide	1997
11.	English Level-II Learning Guide	1999
12.	English Level-III Learning Guide	1999
13.	English Level-I Facilitators' Guide	1997
14.	English Level-II Facilitators' Guide	1999
15.	English Level-III Facilitators' Guide	1999
16.	English Level-I Syllabus	1997
17.	English Level-II Syllabus	1999
18.	English Level-III Syllabus	1999
19.	Mathematics Level-I Students Text	1997
20.	Mathematics Level-II Students Text	1999
21.	Mathematics Level-III Students Text	1999
22.	Mathematics Level-I Teachers Guide	1997
23.	Mathematics Level-II Teachers Guide	1999
24.	Mathematics Level-III Teachers Guide	1999
25.	Mathematics Level-I Syllabus	1997
26.	Mathematics Level-II Syllabus	1999
27.	Mathematics Level-III Syllabus	1999

28.	Environmental Science Level I Students textbook	1997
29.	Environmental Science Level II Students textbook	1999
30.	Environmental Science Level III Students textbook	1999
31.	Environmental Science Level I Facilitator's Guide	1997
32.	Environmental Science Level II Facilitator's Guide	1999
33.	Environmental Science Level III Facilitator's Guide	1999
34.	Environmental Science Level I syllabus	1997
35.	Environmental Science Level II syllabus	1999
36.	Environmental Science Level III syllabus	1999





**Coding Sheet for Evaluation of Textbook Layout and Organization - TBE3**

**I. General Information**

**A. Textbook Layout**

- a. Textbook: Environmental Science, Level I
- b. Unit of Analysis: Textbook organization parts
- c. Coder information

Name: \_\_\_\_\_ Field of Study: Major \_\_\_\_\_ Minor \_\_\_\_\_

Coding dates: Started \_\_\_\_\_ ended \_\_\_\_\_ Total days: \_\_\_\_\_

**II. Instruction:** Mark “X” in the table below under the column “provided” if the organizing part is provided and under the column “not provided” if the organizing part is not provided.

No	Organization Part	Provided	Not Provided
1.	Title page		
2.	Legal page		
3.	Table of contents page		
4.	Introduction		
5.	Headings/topics		
6.	Summary		
7.	Glossary		
8.	References		





**Coding Sheet for the Analysis of the Conditions of Illustrations in the Textbooks - TBE 5**

**I. General Information**

a) Textbook: \_\_\_\_\_ b) Unit of Analysis: \_\_\_\_\_

**Coder Information**

Name: \_\_\_\_\_

Field of Study: Major: \_\_\_\_\_ Minor: \_\_\_\_\_

Coding dates: Started \_\_\_\_\_ Ended \_\_\_\_\_ Total Working Days \_\_\_\_\_

**II. Instruction**

1. Observe the individual illustration in the textbook; see its relation with the chapter it is meant for and determine whether it is related to or not related to the chapter.
2. Write the identification mechanisms (number, letter, topic, ..... ) against the variables in the table.

**Chapter/Unit:** \_\_\_\_\_

<b>Variable</b>	<b>Picture</b>	<b>Diagram</b>	<b>Table</b>	<b>Graph</b>	<b>Map</b>	<b>Total</b>
Total number of illustrations						
Number of illustrations related to the chapter/unit						
Number of illustrations not related to chapter/unit						
Number of illustrations with caption/description						
Number of illustration without caption/description						
Number of illustration with identification number/letter						
Number of illustrations with labeling						
Number of illustrations without labeling						

**Coding Sheet for the Analysis of Gender Balance in the Textbooks - TBE 6**

**I. General Information**

a) Textbook: \_\_\_\_\_ b) Unit of Analysis: \_\_\_\_\_

Name: \_\_\_\_\_ Field of Study: Major \_\_\_\_\_ Minor \_\_\_\_\_

b) Coding dates: Started \_\_\_\_\_ ended \_\_\_\_\_ Total Working Days \_\_\_\_\_

**II. Instruction:** Record required information depending on specific items/variables of the category.

a) Write down the number of chapters/units/lessons of the textbook under the following variable

Chapter/Unit/Lessons	Topics with gender references	Topics with male reference	Topics with female references	Topics with common sexes references

b) **Grammar:** Indicate and tally the number of proper nouns, pronouns and adjectives depicting gender character in the whole textbook.

Chapter/Unit/Lessons	Proper noun		Pronoun			Verb			Adjective			Common Nouns like Teacher, Doctor,... etc		
	M	F	M	F	C*	M	F	C*	M	F	C*	M	F	C*

C\* = Common



## **Appendix D:**

### **Interview Questions to Somali Regional Education Bureau Curriculum Department Head**

1. Are there clearly defined guidelines regarding textbooks preparation in order to keep its quality? If not, what problems have you noticed due to the lack of such guidelines?
2. Is there a textbook policy?
3. What are your judgment/comment on the current practices of textbook development, printing and evaluation? What do you recommend to improve the strategy?

## **Appendix E: Response of Interviews**

### **Interview Questions to Somali Regional Education Bureau Curriculum Department Head**

1. When we come to curriculum development, previously (that is, during the preparation of these ABE textbooks in 1997), there were no guidelines but currently there are guidelines which everyone must follow. These guidelines were prepared to check against the quality of textbooks. These guidelines are followed throughout the textbooks development until it reaches the hands of the students. There is also a way/checklist in which it can assess the textbooks while they are in the hands of the students.
2. Yes, there is a policy currently which guides the curriculum development framework.
3. When we look at the current development of textbooks, there are problems regarding the preparation. These include:
  - The publishers of the textbooks do not consider much on the quality of textbooks.
  - The writers are not well qualified.
  - The writers do not know much of the regional cultures. For instance, you may come across a book prepared by a person who does not know about Somali culture for the region.

Therefore, it will be better if every region prepares and adapts its textbooks instead of handing over a developer and publisher who live in somewhere else.

## **Appendix F**

### **Questions for interview made with textbook writers (Curriculum experts involved in writing textbooks under study)**

1. Is there a guideline either at federal or regional level you used to develop and evaluate curriculum materials for students of pastoralist and semi pastoralist areas learning at ABE centers?
2. Do you have any orientation or training concerning learning materials development?
3. Do you have an experience in teaching and handling primary school students?

## Appendix G: Response of Interviews

Form I<sub>1</sub>

### **Interview made with Somali Education Bureau Curriculum Materials Development and Distribution Department (16-08-2011 E.C)**

1. There is no officially provided guideline in a printed form used to prepare textbooks. But used to conduct successive workshops to train, orient and capacitate our curriculum materials development experts in order to assist them produce quality textbooks. In addition to this IICBA-UNESCO have trained our experts for two weeks on the techniques of preparing interactive textbooks for elementary school learners.

The other method we are practicing regarding textbooks preparation is that before starting to develop or revise a given package of curriculum materials, we used to invite scholars from different institutions including from the regional Education Bureau, and orient the team of experts on the issue.

Regarding the evaluation process, the department has an experience of developing instruments for the curriculum materials evaluation purpose and used to collect data by considering samples of word as, schools, students, teachers and the community. We also conduct content analysis on each of the textbooks to be evaluated. We use these data in applying the process of evaluation and then revision of the textbooks.

2. There is no textbook policy, neither at regional nor at federal levels.
3. It is undeniable fact that most of the textbooks writers in the department have experiences in teaching and handling primary school students, even if the text writers don't have such experiences, experts those have the experiences in teaching and handling primary students are invited from schools in order to participate the development of the textbooks under study.

**Interview made with one of the Environmental Science Textbook Writers (15-07-2011 E.C)**

1. There was no written document used as a guide to write textbooks in general, also textbooks for students those learning at ABE centers of pastoral and semi-pastoral areas. But I have participated on a training organized by the taskforce (Ministry of Education) that was conducted on the issues related with how of developing curriculum materials for pastoralist area ABE centers held in **Bishoftu, Tomy** hotel. We were also provided a guideline by an organization known as EMPDA which recommends issues related with the page layout of textbooks prepared for different levels of students. For example, A4 size is highly recommended for first cycle students because of its appropriateness to express illustrations and letters in higher font sizes.
2. Yes, I had participated in different short term trainings organized by the curriculum department of regional education bureau in the form of workshops held at Jigjiga, Kebribayah and Shinnile.
3. I have not teaching experience in elementary schools, but I have an experience of 8 years in teaching in high schools.

**Interview made with one of the Af-Somali Textbook writers (20-07-2011 E.C)**

1. I did not come across with such guidelines. There is a document previously provided by EPMDA which recommends, specifically, the page setups of textbooks (such as margin and font size, page size, etc) for students at different age and grade levels. For instance A4 size is recommended for lower age and grade students as it is appropriate to write letters and illustrations in higher font sizes.

I had participated in different workshops where trainings and orientation regarding the how of preparing textbooks are conducted. Regarding the preparation of textbooks meant for students learning at pastoralists and semi-pastoralist areas, I have attended two different workshops organized by the Ministry of Education where an orientation on the issues related with the preparation of these textbooks was given and discussions were made. In addition to this I have visited and observed some of the pastoralist areas, communicated with the pastoral community members in Jarar zone and Kebribayah district. I used to observe different situations related with the living conditions of pastoral community. I have visited three different kebeles where ABE centers were constructed later, and a relatively large market place found in Bombas town on Thursday, the local market day. I used to interview some of the members of the community those I found in the market while they are performing their task. Then I collected typical words, phrases and sayings.

2. Yes, these trainings are those I mentioned in my answers for question number one above, and they are not few in number. Two of these training workshops were held in Bishoftu by IICBA-UNESCO. The others were held at different times since 1986 E.C in the different towns of Somalisuch as Shinnile, Jigjiga, Kebribeyah, and Awbarre. ICDDR had also organized different workshops and trained regional curriculum materials development experts of all regions, at federal level, on how to develop curriculum materials while conducting revision of the syllabi.
3. I have taught grades seven and eight for two years. I have also an experience of teaching at high schools for fifteen successive years.

**Interview made with one of the English Language Textbook writers (20-07-2011 E.C)**

1. I do not have any guideline given to me regarding the issue of preparation and evaluation of textbooks in general. But there was orientations and trainings on the issues related with the development of textbooks since 1986 E.C that was earlier, before my coming to the bureau as an expert. I have participated on these training held at Shinnile, Jigjiga, Kebribayah and Bishoftu towns at different times. There were also trainings on awareness creation programs regarding the general methods of the preparation of textbooks for learners at ABE centers of pastoralist and semi-pastoralist areas at Dr. Abdulmajid Hussein, CTE in 1995 E.C and Jigjiga Hotel in 1998 E.C. These trainings were organized by Ministry of Education and I have participated on these trainings.
2. Yes, I have participated on the trainings held at Shinnile, Jigjiga, Kebribayah and Awbarre, where the trainings were on the methods related with curriculum materials development, and minimum learning competencies formulations.
3. I have been a high school English language teacher for ten consecutive years.