

# **‘Sign Language’ use as Medium of Instruction: The Case of Grade One and Two at Mekanissa School for the Deaf**

**By**

**Elizabeth Demissie**



**Addis Ababa University**

**School of Graduate Studies**

**Institute of Language Studies**

**African Languages and Applied Linguistics Program**

**June, 2011**

**Addis Ababa**

**‘Sign Language’ use as Medium of Instruction: The Case  
of Grade One and Two at Mekanissa School for the Deaf**

**By**

**Elizabeth Demissie**

**Advisors**

**Birhanu Bogale, Phd**

**Eyasu Hailu, MA**

**Addis Ababa University**

**School of Graduate Studies**

**Institute of Language Studies**

**African Languages and Applied Linguistics Program**

**June, 2011**

**Addis Ababa**

**‘Sign Language’ use as Medium of Instruction: The Case of Grade One and Two at Mekanissa School for the Deaf**

**By**

**Elizabeth Demissie**

**Approved by the Examining Board**

\_\_\_\_\_  
**Chairman, Department  
Graduate Committee**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Advisor**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Co-advisor**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Internal Examiner**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**External Examiner**

\_\_\_\_\_  
**Signature**

## **ACKNOWLEDGEMENT**

First and most, I would like to express my gratitude to my advisors Dr. Berhanu Bogale and Eyasu Tamene for their unreserved and invaluable advice. I don't have words to express my thanks to them.

I would also like to express my heartfelt thanks all the staffs of Mekanissa School for the Deaf for their unlimited cooperation during the data collection. Had it not been for their collaboration, my paper would never have appeared like this.

Ato Derege Geberie, Head of Amharic Department, Dr. Getahun Amare, ILS Dean and Ato Kassu, ILS registrar, Yetbayen and Zeleka will be the other who exceptionally deserves a specific mention for their immense concern and encouragement to finish the study.

Kallie Szczepanski, will be the next to whom I extend my wholehearted thanks for her help in editing this paper. Binyam Jemberie, Mehari Zemelak, Demeke Kebede, Tigist Alemayehu, Tsehay Mulugata, Nestanet Maneye, Abebaw Kassa and Ermias Mekonnen are the other friends I would like to extend my sincerest thanks to the diversified helps they offered me during my study.

My special thanks go to my beloved husband Girum Akililu for his thoughtfulness, continuous encouragement, sense of humor and support throughout the work.

Finally I would like to say many thanks to my family. Especially my Dad, Demissie Dadi and my sister, Meskerem Demissie deserves heartfelt gratitude. They have a lot to contribute not only to this paper but also to my education and my life as it stands.

**DEDICATION**

*To all Deaf students in Ethiopia*

# TABLE OF CONTENTS

<u>CONTENTS</u>	<u>PAGES</u>
ACKNOWLEDGMENT -----	I
DEDICATION -----	II
TABLE OF CONTENTS -----	III
ACRONYMS -----	IV
ABSTRACT -----	V
CHAPTER ONE- INTRODUCTION	
1.1. Background -----	2
1.2. Statement of the Problem -----	2
1.3. Objectives -----	5
1.4. Research Questions -----	5
1.5. Significance of the Study -----	6
1.6. Scope of the Study -----	7
1.7. Definitions of Key Terms -----	8
CHAPTER TWO- REVIEW OF RELATED LITERATURES	
2.1. Language in Education -----	9
2.2. Which Language for Education? -----	11
2.3. Which Language is a Mother Tongue or First Language for the Deaf?.14	
2.4. Sign Language as Medium of Instruction -----	15
2.4.1. Pedagogical and linguistic benefits of employing sign language in Deaf Education -----	16
2.4.2. Linguistic Human Right of Sign Language Users -----	17
2.5. Approaches to deaf Education -----	19
2.5.1. Oralism -----	19
2.5.2. Total Communication -----	20
2.5.3. Simultaneous Communication -----	21
2.5.4. Bilingualism -----	23
2.6. Using Sign Language in Classrooms -----	25
2.6.1. Classroom Organizations -----	25
2.6.2. Material Availability -----	25
2.7. Language Attitude and its Implication in Education -----	26
2.8. Sign Language and Deaf Education in Ethiopia -----	27
CHAPTER THREE- RESEARCH METHODOLOGY	
3.1. Research Design and Methods -----	31
3.2. Sources of Data and their selection -----	32
3.2.1. Students -----	33
3.2.2. Teachers -----	33
3.2.3. Parents -----	34
3.2.3. School Principal and Other Officials -----	34

3.2.5. Documents -----	35
3.3. Data Collection and Instruments -----	35
3.3.1. Classroom Observation -----	35
3.3.2. In-Depth Interview -----	36
3.3.3. Document Analysis -----	36
3.4. Data Analysis and Presentation-----	37

#### CHAPTER FOUR- DATA ANALYSIS, PRESENTATION AND FINDINGS

4.1. Background of Mekanissa School for the Deaf -----	40
4.2. Data Analysis And Presentation -----	41
4.2.1. Bios of the Research Subjects -----	41
4.2.2. Deaf communication Approaches Employed in the Classes -----	42
4.2.3. Medium of Instruction (MOI) Employed in the Classrooms -----	45
4.2.4. Proficiency of the Teacher and Students in the MOI -----	48
4.2.4.1. Teachers Competence -----	48
4.2.4.2. Students Competence -----	50
4.2.5. Classroom organization and Materials Availability -----	52
4.2.6. Attitude Towards Sign Language MOI -----	54
4.2.6.1. Students' Attitude -----	55
4.2.6.2. Teachers' Attitude -----	56
4.2.6.3. Parents' Attitude -----	57
4.2.7. Challenges and Opportunities of Employing the MOI -----	59
4.2.7.1. Challenges Related to Proficiency -----	59
4.2.7.2. Challenges Related to Classrooms Situations -----	61
4.2.7.3. Challenges Related to Materials -----	62
4.2.7.4. Challenges Related to Language Attitude -----	64
4.2.7.5. Challenges Related to Policies -----	65
4.2.7.6. Opportunities -----	66
4.3. Discussion of Findings -----	68
<b>4.3.1.</b> Deaf Communication Approach Employed in the Classes -----	68
<b>4.3.2.</b> The MOI Used in the Classrooms -----	70
<b>4.3.3.</b> Competence of the Teachers and Students in the MOI-----	71
<b>4.3.4.</b> Classroom Organizations and Material Availability -----	72
<b>4.3.5.</b> Attitude Towards Sign Language MOI -----	74
<b>4.3.6.</b> Challenges and Opportunities of Employing the MOI-----	75

#### CHAPTER FIVE- CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions -----	78
5.2. Recommendations -----	81
BIBLIOGRAPHY -----	84
APPENDICES -----	90

## **ACRONYMS AND ABBREVIATIONS**

<b>ASL</b>	American Sign Language
<b>EthSL</b>	Ethiopian Sign Language
<b>MOE</b>	Ministry Of Education
<b>MOI</b>	Medium Of Instruction
<b>SimCom</b>	Simultaneous Communication
<b>TC</b>	Total Communication

## **ABSTRACT**

*Literatures show sign language is a fully fledged language that can be employed effectively to teach the contents of a curriculum as spoken language. Though the use of sign language in education makes sense educationally, linguistically and psychologically there are many grievances in the practices. In many parts of the world, sign language is seldom used in formal education. On the other hand, when signing is employed, it is either in the form of contact sign language or an artificially constructed manual in which sign codes for a spoken language, mostly.*

*In view of that, this research has attempted to examine sign language use as medium of instruction in primary classes of Mekanissa School for the Deaf. To deal with this, the study employed a case study research technique. The data collected through 20 classroom observations, individual interviews with 7 teachers, 10 students, 10 parents and 3 officials as well as several document analyses. Those data were examined and presented based on their themes in detail following narrative analysis method to achieve the purposes.*

*According to the findings of the study, the Deaf communication approach dominantly employed in primary classes of Mekanissa School for the Deaf is SimCom which is considered as best method by the teachers. Signed Amharic (Manual Codes for Amharic) is the principal MOI, while written and spoken Amharic served in few classroom activities. Unfortunately, the natural EthSL rarely employed as it is in many countries in the world. On the other hand, both the teachers and the students exhibited incompetency to make use of the signed language in the classes besides their unconvinced attitude to utilize the natural sign language as capable instrument of education. The classrooms and their facilities also found to be unsuitable to sign medium.*

*The challenges that hinder the effective utilization identified as they are related to improper proficiency of the teachers, students and the language itself, negative attitude of the users, poor classroom facilitation, material unavailability and lack of clear policies. On the contrary the manualist philosophy the school advocates and sign language training programs of the school appeared to be opportunities for further improvements.*

*Generally, using sign language as MOI has several drawbacks in the cases. However, considering its benefit for Deaf learners, the research suggested to persist on using it along with conducting researches to improve the drawbacks in the practices.*

# **CHAPTER ONE**

## **1. INTRODUCTION**

This introductory chapter will give insight into the research undertaken by way of presenting some basic issues like the background of the study, a statement of the problem, the objectives of the study, the research questions, the significance of the study, and the scope of the study subsequently. A definition of key terms will also be given at the end.

### **1.1 Background**

Language is a very important element in education. Most communication in teaching-learning processes can be done through language. To express the vitality of language in the process, Wolff (2005, 49 cited in Ndjoze-Ojo, 2006) says, “Language is not everything in education but without language everything is nothing in education.”

On top of that a child can acquire knowledge about the world mainly through his/her first language (Grosjean, 2008). Therefore bringing this first language or mother tongue into formal education is an advantage for students’ achievement at school (Heugh and Others, 2007). Since sign language is the first language or one of the first languages acquired by children who have hearing loss, it plays an important role in the Deaf child’s education and performance (Skutnabb-Kangas, 2008).

As Jokinen (2003) states, many Deaf children of the world are taught through other dominant language(s), like other minority students. He also adds, this kind of teaching often prevents the Deaf children from profound literacy and gaining the knowledge and skills that would correspond to their innate capacities. Such skills would be needed for socio-economic mobility and participation.

Despite this fact, educating the Deaf and using sign language to train them have been ignored for many years. According to UNESCO's statistics in 2005, over 98% of Deaf children in the world never receive education in their most fluent language, sign language.

Similarly in Ethiopia, educating the deaf has got attention only for few decades. As stated in the Ethiopian Sign Language (EthSL) Dictionary (2008), Deaf education using sign language started in the 1960's. The first school for the Deaf was established by missionaries from America in 1964- Mekanissa School for the Deaf (Hailu, 2003 and Reynolds & Fletcher-Janzen, 2007). The missionaries brought dominant and contemporary theories of Deaf education in America which were Simultaneous and Total Communication (Hailu, 2003). With the Simultaneous Communication (SimCom) model, signed English was used rather than the natural sign language and in the Total Communication (TC) version spoken English was used along with ASL. Similarly, Nordic countries also left their footprint in sign language use in Deaf education (EthSL Dictionary, 2008).

Sign language has been serving in Deaf education for the last five decades, though how it is employed does not get enough attention from researchers. By looking at the research gap, this study conducted to explore how sign language is engaged as a medium of instruction in the first Deaf school in the current Ethiopia<sup>1</sup>- Mekanissa Deaf School primary classes.

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

It is difficult to get dependable statistics about the number of Deaf people in Ethiopia. The figure from the 1994 Housing and Population Census shows there were about 190,220 deaf and hard of hearing people. It is also estimated to be around 270,000 in 2007 by taking 2.9% annual population growth as reference. However this figure is assumed as it is underestimated because of

---

<sup>1</sup>Few years before the opening of Mekanissa School for the Deaf, there was Keren School for the Deaf, in Eritrea.

some factors like not accepting the Deaf and the existence of many homeless Deaf. Accordingly, the number reaches about one million according to the WHO (EthSL Dictionary, 2008) statistics. Thus addressing problems related to the Deaf in research means addressing issues of a million which are considerable part of the society.

Language is the focus in this research. Concerning that, language acquisition among Deaf people is one of the key issues. As the statistics show, more than 95% of Deaf children in the world have hearing parents; therefore, their language acquisition takes place mostly at school (Grosjean, 2008 and Skutnabb-Kangas, 2008). Deaf students in developing countries like Ethiopia hardly get the opportunity to attend schools properly and obtain suitable formal education. Deaf schools are available in few populated and urban areas. Consequently, many Deaf people have experienced difficulties in establishing adequate social interaction with other group of the society, attributable to language quandary. In most cases they grow up to be illiterate (Jokinen, 2003).

The Deaf who have gotten the chance to attend schools, on the other hand, face another trouble. Since the use of sign language was discouraged in most educational institutions for many years (Yule, 1996), Deaf people have been forced to use languages other than their mother tongue or the language in which they can communicate effectively. Especially following the 1880 Milan conference until 1960's Deaf children were forced to learn oral languages, thinking those languages are the only fully fledged languages to acquire knowledge and pursue formal education.

These practices for several years disregarded the child's right to learn through the language he/she has more effective access to/knowledge of (Jokinen, 2003) or mother tongue. As Jokinen stated, though there are some improvements in sign language use for education in recent years, the area still needs attention. National and international human and linguistic rights movements are struggling to accomplish the mission of using sign in Deaf education fully. For

the undertakings of the mission, research of this kind has made its own contribution. This is one of the reasons that inspired me to conduct the study on sign language use in education.

Additionally, in the last four decades the significant number of Deaf children who acquire sign language at school tells us, the study is important to deal with the condition of considerable part of the society (Skutnabb-Kangas, 2008, Grosjean, 2008). Furthermore, schools for the Deaf are places where full-fledged sign language can be acquired should get more attention and should be researched explicitly to have effective practices in language uses and language learning. This is the other motivating factor in conducting this research.

The general development and dispersion of sign language have a very vital role in improving the life of the Deaf (Ethiopian Sign Language Dictionary, 2008 and Jokinen, 2003). As many scholars in the field have suggested, for Deaf students, communication using sign language is key to their active participation in any area. More importantly it could facilitate having equal access to education like their hearing counterparts. Thus, developing Ethiopian Sign Language (EthSL) and using it as a MOI at schools can contribute a lot to the improvement of deaf people's lives. The use of the language for such purposes should be based on researched facts. In line with this, research of this kind has its own role, since they look at what is really going on in school environments in addition to implicating some direction of improvement in the future.

Having these general motivating factors, there were also things that touched me while taking a "Sign Language in Africa" course. When we discussed sign language use in education, I understood that very little is known about sign language, Deaf community and related issue among the public at large. EthSL, I observed, is an inadequately researched area. Therefore I decided to conduct my research in this topic to contribute a little in filling this knowledge gap.

Since there are only few references regarding sign language use in the educational system of Ethiopia which are done from language perspectives, this research a single reference that can be used for courses given in the department of Ethiopian Sign Language and Deaf Culture at Addis Ababa University.

### **1. 3. Objectives**

The major objective of this study is to explore how sign language is employed as Medium Of Instruction (MOI) in grade one and two of Mekanissa School for the Deaf.

The specific objectives are:

- to explore the Deaf education approach (es) and languages used in the school;
- to evaluate the teachers' and students' competence to use sign language as MOI;
- to assess the classroom environments for using sign language as a medium;
- to assess students', teachers' and parents' attitude towards sign language medium education;
- to identify challenges and prospects to use sign language as a medium of instruction.

### **1.4. Research Questions**

To achieve the cited objectives, the study attempted to answer the following research questions:

- Which is the Deaf education approach(s) employed in the school practically?

- What are the languages of teaching and learning classrooms? How?
- How are the classes organized to accommodate the MOI properly?
- Are the teachers and the students competent to express their idea and concepts in sign language as a language of learning and teaching?
- What is the attitude of the students, teachers and parents towards the language of teaching and learning?
- What are the challenges and the prospects to use sign language as a medium in the classroom?

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

Conducting research on sign language use in Deaf education could provide benefits in the following ways:

First, the research will increase our understanding of how sign language is employed in Mekanissa School for the Deaf. Since the study focuses on the first school for the Deaf in Ethiopia, it might give some insights about the level of sign language use in the education system of the country.

Secondly, because this study looks at Deaf students' primary classes' language use in education, it can show the situation at the beginning level briefly. Educators and policy makers can gain some idea about how mother tongue medium education is carried out in this crucial level. Language in education policy makers especially may get some pictures of Deaf students' special needs regarding language and how it should be entertained.

Thirdly, which Deaf education approaches and languages are serving in the school is identified. Their strengths and weaknesses are discussed in reference to the best practices. Thus, Deaf schools could learn something from that in selecting their approach.

Fourthly, it can contribute in identifying practical problems. The research looks at material availability, classroom organizations and other classroom practices in relation with sign language use as a medium. Therefore it demonstrates both challenges and prospects in classrooms. The study also sorts out attitudes towards sign language use in education at the grassroots level. Therefore it can be taken as an input for improvement actions by Deaf educationalists.

Finally, it can have the benefit of being a base for further research and contributing in some way to filling the research and knowledge gap in the area.

### **1. 6. Scope of the Study**

This study aims at exploring how sign language is employed as a medium of instruction in grade one and two at Mekanissa School for the Deaf. In addition, identifying Deaf education approaches, languages used in the school, materials available to use sign language as medium and teachers' and students' competence in the medium are in focus. The suitability of the classroom environments, students', teachers' and parents' attitude towards sign language as a medium of education are among the areas that get attention in this paper.

The scope is limited to investigating the practice of employing sign language as a language of teaching and learning in the two grades. The researcher decides to focus on grade one and two, since these classes are the most important stage in formal education and Deaf students' sign language acquisition and learning. As literatures of the area reveal, language acquisition and learning of most Deaf people takes place at school. In that, the first primary classes are crucial as a foundation.

On the other hand, other Deaf education issues apart from the language use and the Deaf students' academic achievements are not in the scope of this study. Though the language used in education has effects on students' academic success and there are many issues that could be raised in Deaf education, the research is not intended to evaluate that here.

## 1.7. Definitions of Key Terms

**Deaf** (with capital d) –is a name for a linguistic group whose preferred means of communication is sign language. The rise of the Deaf Pride movement in the 1980s has introduced a distinction between *deaf* and *Deaf*, ‘D’ with the capitalized form used specifically in referring to deaf persons belonging to the community or that linguistic group.

**Mother tongue** – might not be the language of the Deaf child’s families or parents. Rather it is a most preferred language of the Deaf person. So that the Deaf identify with it and that they can express themselves fully. That is sign language.

**Sign language**- refers to a systematic visual-gestural language that can appear naturally or created by contact forms. This includes all natural sign languages, artificially coded sign languages, pidgin and Creole languages.

**Attitude** – in this research refers to the teachers', students, parents and officials way of thinking about using sign language as MOI as it is articulated by them.

**Competence** - refers to language knowledge of the rules governing the formation of sign in EthSL or Signed Amharic. This is seen with an individual's actual use of a language or performance, including hesitations and errors.

## **CHAPTER TWO**

### **2. REVIEW OF RELATED LITERATURES**

As the study aims at investigating sign language employment as MOI, reviewing literature that has relevance to the topic is imperative to have an analytical framework. So, in this chapter, literature written on language in education and sign language as a medium of education are assessed. The main topics of the review are: language in education, sign language employment as MOI, its pedagogical and linguistic benefits, the linguistic human right of signers, major approaches to Deaf education, classrooms organizations in sign language medium classes and language attitudes as well as sign language use in Ethiopian education.

#### **2.1. Language in Education**

Language and education are strongly linked matters (Alidou and Others, 2006). Cantoni (2007) also describes human thought processes and cognitive development and highly connected with language. From this it can be inferred that human learning lays on the foundation of language proficiency. Similarly Heugh and Others (2007) note that much research confirms that language is an imperative factor in the learning process and educational competence of the learner. For most educational activities, it is a major means of communication. Thus, it is possible to say that language is a key in education (Alidou and Others, 2006). As Ndjoze-Ojo (2006), explains by referring to Wolf (2005, 49) “language is not everything in education, but without language everything is nothing in education.” This informs the important role language plays in education for effective and efficient learning, as well as educational responsiveness.

Despite the above facts, as researches confirm, many learners in Africa do not understand well the languages used in their education (Cantoni, 2007, Heugh and Others, 2007, Alidou and Others, 2006). As a result, they are often barred

from learning opportunities or/and are commonly disadvantaged from equal educational participation and achievements. Accordingly, any discussion about language is essentially a discussion about access to education (Ogotu, 2006).

In many cases, discussions and choices of languages for education are made based on historical, political and cultural grounds, and also on the basis of pedagogical and linguistic norms (Seyoum, 2001). Following that, policy documents make known the decisions on different languages and their usage. As Herriman and Burnaby (1996) describe, educational language policy as a piece of a general language policy determines which language will be used as a MOI as well as which languages will be taught as subjects, and at which level. In line with this Paulston (1999) spells out the demand of policy formulation, since language use in education is one of the key domains that should be defined officially. In the process, given the interlinked nature of language and education, care should be taken in the decision making. Other social, economic and political accesses which are related to language play an important role, so attention must be paid to those factors during preparation of the language policy in educational settings (Schmidt, 2006).

Paulston (1999) furthermore clarifies that language policies are usually planned to promote complete participation of societies and economic growth by bringing reasonable and meaningful access to education. According to him, this can also direct equalization-program development of the previously disadvantaged languages and the conceptual growth of the language users. Typically, the language rights guaranteed by law guide the specific language use in school and the development of the general framework in the educational institutions. For example, the experience of South Africa reflects this common procedure. The Language Policy Framework for South African Higher Education (2001) clearly states the following:

There are two main values we wish to promote in the area of language, which are, firstly, the importance of studying through the language one knows best, or as it is popularly referred to, *mother-tongue* education, and secondly, the fostering of multilingualism. We do believe that an initial grounding in mother-tongue learning is a pedagogically sound approach to learning. We also believe that multicultural communication requires clear governmental support and direction.

In summary, language in education is one of the most important topics in a country's development (Cantoni, 2007). The issue of language choice for MOI and as school subjects is crucial, since it has personal and community-wide effects on different languages users. Though these policy issues and decisions in the educational sphere are significant, they are often controversial. The major vexation appears while selecting a language or languages over other to be used in education (Roy-Campbell, 1995).

## **2.2. Which Language for Education?**

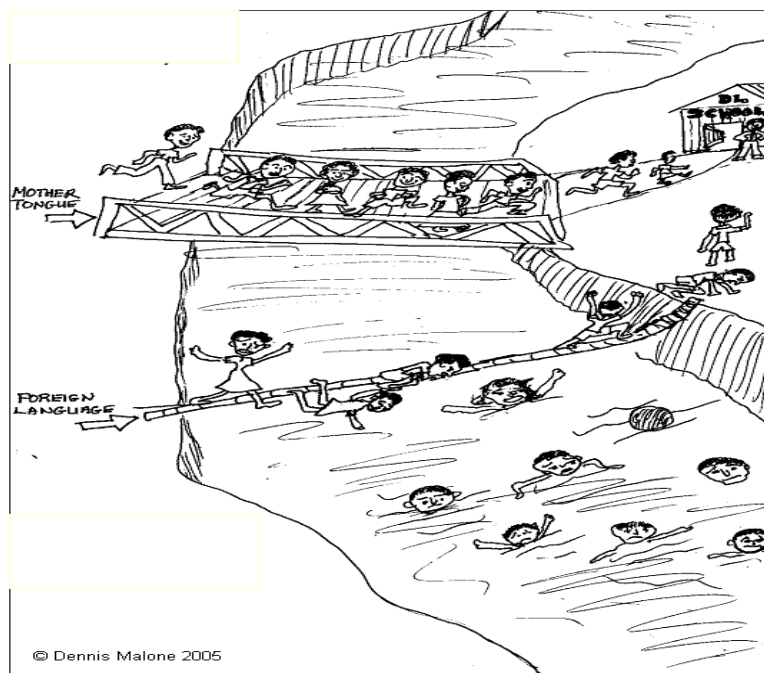
Many research findings show that students can perform better at school when they learn through their mother tongue or first language (Heugh and others, 2007; Kosonen, 2009). Students' first language is the most preferable language over any other languages, especially at the primary level (Kosonen, 2009, Cantoni, 2007).

However, there are many situations that force schools to educate students using languages other than their mother tongue. In such second language applications in education, according to contemporary research, many students have difficulty in acquiring the required skills and knowledge (Roy-Campbell, 1995, Alidou and others, 2006, Ogutu, 2006). Students of such systems usually show unsatisfactory educational achievement. They typically repeat grades, drop out of school, and fail in their education due to preventive language use in the education system (Kosonen, 2009).

As the above-mentioned researchers explicate, most of such language misuse comes out of improper understanding of the role language plays in learning. Studies in different contexts show that it is very difficult to perform well in second language learning conditions. A very few may perform well, but with great effort. Above all, learning achievements in such situations may not be as high as they could have been, had their first language been used. Kosonen (2009:9) says the following in line with the few achievers of second language learners and their unrepresentativeness to take such system as a successful approach:

There are always a small proportion of students who succeed anyway despite unsupportive conditions. Such students are sometimes used as examples why first language-based education is not essential, but the fact that they are exceptions is often forgotten by those making such arguments. Nonetheless, it is unlikely for many students to perform well in school where leaning takes place in a foreign language(s).

Additionally, Kosonen (ibid) illustrates this idea in the following interesting cartoon:



***Comparison of students learning through their mother tongue and a foreign language (Kosonen, 2009: 10).***

The picture clearly shows that students who study through their mother tongue cross the education river comfortably on the bridges of their language. This symbolizes the better performance they can have at school. On the other hand, learners who use a second language as medium suffer a lot to cross the river. Rather than succeeding, most of them fall down and this shows their difficulties in performing well at school using second or foreign language as a medium.

Based on the above mentioned factors, Kosonen (2009) strongly suggests learners' first language as a better language of education. It is advisable to employ students' mother tongue to be the medium of instruction at least at the preschool and primary level of their education. To strengthen this argument about the language choice in education, the scholar raises several reasons, by referring to many international studies. Some of the points are:

- ✓ Learners with a good foundation in their first language are likely to have better second language acquisition. In other words, learning in a first language facilitates learning in second language.
- ✓ It is easier and faster for students to learn reading in their mother tongue than any other language.
- ✓ Learners' first language lets learning curriculum contents start from the first day of school.
- ✓ Mother tongue medium education helps to transfer what is learned in a first language to second languages, also vice versa.
- ✓ Strong first language learning facilitates better academic performance in a second language, but after acquiring sufficient proficiency in second language.
- ✓ Using the learners' mother tongue helps teachers to assess actual learning achievements of the students' rather than one based on low language proficiency.

To sum up the issue of which language to employ for education, many agree that learners' first language or their mother tongue is the best MOI. As Kosonen (2009) argues by referring to Smits, Huisman and Kruijff (2008), use of the mother tongue as the medium in formal education is favored for psychological, sociological and educational benefits of learners. In line with this, they add, given the learners' inefficiency in the second language they use in education, they usually do not understand what the teachers try to teach them. If the teacher and the students do not speak the same language, the teacher finds it difficult to understand his/her students and the students become frustrated, hence the school environment as well as the language at school is strange for them.

After having such grounds about which language should be used in education, it is also important to be clear what the mother tongue is for different learners.

### **2.3. Which Language is a Mother Tongue or First Language for the Deaf?**

According to Ogutu (2006), "mother tongue of a person is a language that makes him/her capable of performing the informational function of a language perfectly than other languages." Furthermore, Skutnabb-Kangas (2008) defines mother tongue in a number of ways: the language one is identified with, the language one identifies with, the language one knows best, the language one uses most. Without taking such a broad description, it is very difficult to make out the mother tongue of many Deaf persons.

As Skutnabb-Kangas (ibid) describes, the parents of about 95% of Deaf children are hearing. For these Deaf children, sign language is the language that they can communicate with best. Unlike hearing children, the language of the Deaf is not the language of their parents. Thus, it is practical to define mother tongue for signers as the language that they identify with, the language that they would be identified as native speakers by others or the language they can express themselves fully in.

Deaf children can have access to education properly, if they are able to learn sign language and get formal education through their mother tongue- sign language (Skutnabb-Kangas, 2008). However, in reality, as Jokinen (2003) describes, over 98% of Deaf children in the world receive education in languages other than their mother tongue.

#### **2.4. Sign Language As Medium Of Instruction**

Sign language has the same purposes for the Deaf child as any mother tongue as spoken language has to a hearing child (Skutnabb-Kangas, 2008). As spoken language native speakers, native signers can develop personal and cultural identity, express thoughts and feelings, develop metalinguistic and communication skills, and enjoy good self esteem and social skills through their group language or sign language (Jokinen, 2003).

However, for several years, Deaf children have been discouraged from learning through sign language. This has been done because of parents' and Deaf educators' beliefs that avoiding sign language will encourage spoken language acquisition of Deaf children (Yule, 1996; Jokinen, 2003). This idea has been highly advocated, especially following the 1980 Milan conference on Deaf education. After more than 80 years of promoting oralism, it was recognized as a failure and the use of manual communication in education regained approval in many Deaf education institutes. However, there are schools that continue to advocate orality today (Yule, 1996).

One important point to mention here is that research does not suggest that the avoidance of sign languages improves speech abilities of the Deaf child (Haualand and Allen, 2009). For that matter, much evidence illustrates that Deaf child with better signing ability show better speech, lip reading, and reading abilities (Kosonen, 2009, Jokinen, 2003). Thus, recently it has begun

to be more common practice to encourage Deaf children to learn sign language in their early life.

Using learners' first rather than their second language as the language of teaching and learning is very sound educational practice. As Glaser and Lorenazo (2006) describe, there are many institutions that have employed natural sign language as a MOI for the Deaf by understanding its benefits. However, Glaser and Lorenazo (ibid) stated there are also schools that resist the use of sign language as MOI. The resistance comes out of misconceptions about the language. The primary misconception is perceiving sign language as an imitation of spoken languages (Adoyo, 2002). Many with such perceptions consider that sign language is not a natural language and is inferior to spoken languages.

Despite the misunderstandings, the pedagogical advantages of using sign language in Deaf education, and linguistic human rights of sign language users, have been getting attention (Kosonen, 2009, Jokinen, 2003).

#### **2.4.1. Pedagogical and Linguistic Benefits of Employing Sign Language in Deaf Education**

Teaching and learning Deaf people through sign language has several benefits. Strengthening the identity of the Deaf student as a sign language user and as a member of a signing community are among these benefits (Kosonen, 2009 and Jokinen, 2003). Through learning sign language as a mother tongue, they can develop good bi- and multilingual skills, as well as the ability to meet the cultures of other communities (Grosjean, 2008). In addition, as research shows, by having good skills in sign language the student can learn spoken languages and develop good communication and academic skills (Kosonen, 2009). With regard to developing cultural identity, Deaf children can gain

valuable lessons from sign language literature and folklore. This also provides important support for linguistic skills acquisition (Jokinen, 2003).

In line with this, Reagan (2008) says Deaf children are more at ease in acquiring sign language than any other languages. He also adds that the acquisition of sign language has similar processes with first language acquisition of spoken language. Thus, sign language can be employed as effectively to teach the contents and literacy skills as spoken language is. More to the point here, early language acquisition- sign language- is essential to Deaf children for cognitive skill development and later literacy skill acquisitions. In all these, it should be noted that sign language is viewed as a natural language for the Deaf children and the issue of sign language use in Deaf education is an issue of employing the child's mother tongue.

Though, as Reagan (2008) describes, the use of sign language in education make sense both educationally and linguistically, there are many grievances about the practice. In many parts of the world, sign languages are seldom used in formal education. On the other hand, when signing is employed, it is either in the form of contact sign language<sup>2</sup> or an artificially constructed manual in which sign codes for a spoken language, mostly. However as scholars suggest, instruction should take place through the medium of the appropriate sign language- natural sign language.

#### **2.4.2. Linguistic Human Rights of Sign Language Users**

Linguistic human rights are part of general human rights that can be secured by the language policies of a country. The existence or absence of such policies in a country can protect or obstruct the rights of the languages and their speakers. To safeguard languages and their users, UNESCO recommends that

---

<sup>2</sup> Contact sign is also known as Pidgin Sign English or PSE. It is considered a contact language. When people have two different languages and desire to communicate with each other, contact languages are the natural outcome of their communication. This is different from the artificially coded sign languages, since they are not designed or invented purposely.

states have clear language policies that consider the right of minority groups. UNESCO also encourages giving official recognition to languages that have even a small number of speakers (Mutes, 2006).

In many international documents it is recognized that the Deaf are linguistic minority group, and that sign language is a minority language (Jokinen, 2003). Since recognition of one's language is recognizing the person, the issue of sign language use is entertained as an issue of human rights. When the language gets recognition, the speakers of the language can receive education, information and services in their own language. This is one of the ways to bring equality and equity in access to information and communication. Haualand and Allen, (2009:23) put the fundamentality of recognizing sign language to be used in any sector in the following way:

Saying 'yes' to sign language, is saying 'yes' to Deaf people, while saying 'no' is the same as to say no to Deaf people and their opportunity to enjoy equal citizenship. Recognition of sign language also implies a 'yes' to the linguistic and cultural identity of Deaf communities, as culture and identity are part of language.

Using sign language in education is one of the issues about linguistic human rights of the Deaf. As Reagan (2008) describes, using sign language in Deaf children's education is not only a good educational and linguistic practice, but also the only way to address the Deaf students properly. Getting a proper education is an issue of human rights (Haualand and Allen, 2009). Thus sign language users' agenda about language and education addressed as a human right, as well as a minority right agenda. Like other minority rights issues, the language rights of the Deaf people are complex by their nature. However the case of the Deaf are more complex than most, since the majority of Deaf people's parents are hearing and they do not have the same mother tongue. Then again, the implication that language rights have on resource allocation and its strong relation with identity are the other factors that make the issue open to questions (Reagan, 2008).

Regardless of the controversy in the area, sign language users and their rights are getting attention following the mother tongue education and linguistic minority group rights movements by different groups (Reagan, 2008 referring Skutnabb-Kangas 1994; Muzsnai 1999; Jokinen 2000; Reagan 2005).

## **2.5. Communication Approaches in Deaf Education**

Having an appropriate approach to educate the Deaf has been one of the most controversial issues in the area. There has been difficulty in finding a suitable communication system in classrooms to make the curriculum contents accessible and to bring better performance in Deaf education. In these, as studies suggested, the key issue was applying the appropriate language of instruction, which should get adequate attention in the education system. In search of a better approach in Deaf education, there have been different systems developed and applied all over the world (Adoyo, 2002). The historical move goes from pure Oralism to Total Communication and to the emergent approach- Bilingualism, though the issue remained unresolved yet.

### **2.5.1. Oralism**

Oralism is one of the approaches which appeared in modern Deaf education in the 19th century by prevailing over the manual methods used prior to it. It has been widely advocated as an approach from the time of the Milan Conference on Deaf Education until 1980 (Haualand & Allen, 2009). During the second International Congress on the Education of the Deaf-Mutes at Milan, Italy in 1880, it was acknowledged to be the only method to educate the Deaf. In the conference, the participants passed a declaration stating that the oral method should be preferred to that of manual methods in the education and instruction of Deaf people. Sequentially, the natural sign languages used by the Deaf were banned from most schools for the Deaf (ibid).

Generally speaking, the methods in Oralism emphasize the development of skills in the areas of speech, speech reading and residual hearing (Haualand & Allen, 2009 and Adoyo, 2002). The assumption of these oralists is that spoken language is the basis for standard social and academic communication (Haualand & Allen, 2009). They also believe that the human system is designed (pre-wired) to learn language expressed in speech, thus children can learn about and from spoken language. Even minimal amounts of residual hearing are presupposed to lead to the development of spontaneous speech and language, if that residual hearing is stimulated (Adoyo, 2002).

As Adoyo (ibid) states, however, reports continuously show the oral approach in Deaf education is malfunctioning. As a result of these inappropriate language uses, Deaf people's literacy level remains low and limits their access to and participation in civil life. This situation entails the need for other appropriate approaches in Deaf education, though oral education has had support in some places (Haualand & Allen, 2009).

### ***2.5.2. Total Communication (TC)***

After looking at the failures in the oral approach in Deaf education, Total Communication (TC) emerged, holding the idea of using all forms and modes of communications to educate the Deaf (Zapien, 1998). TC as a manual approach incorporated many different modes of communication: sign language, voice, finger spelling, lip-reading, amplification, writing, gesture and visuals (Haualand & Allen, 2009, Glaser & Lorenazo, 2006 and Zapien, 1998). The core idea in total communication is creating a less restrictive learning environment for the Deaf child, who is free to develop communication preferences, although the child will be encouraged to use both speech and sign language. The philosophy behind this is that the method should be fitted to the child, instead of the child fitted the method (Glaser and Lorenazo, 2006).

Many parents and educators of the Deaf favor total communication as a catch-all that ensures the Deaf child's access to some means of communication (speaking as needed, or signing as needed). However, studies show that it is not a preferred way by Deaf learners, though it is better than the oral methods (Haualand & Allen, 2009). The setback of total communication, as Haualand & Allen (ibid) note, is that signing and speaking at the same time can result in a compromise that affects the quality of one or the other. This can impact the quality of educational information received by a Deaf student. In addition, it is confirmed by Deaf students in many places, their most preferred communication option is voice-off sign language, and they disliked the idea of total and/or simultaneous communication, even if there is an interpreter to help (ibid).

Despite all this, TC is still perceived and employed widely as a method that would meet the needs of Deaf children. Currently, as scientific evidence continues to pile up that sign language is the natural language of deaf children and they can learn best through this natural language. Following such findings the pendulum is swinging again in the other direction.

However since the beginning of the 1960's there have been different types of manual communication approaches observed in Deaf education which share some features with TC.

### ***2.5.3. Simultaneous Communication (SimCom)***

Simultaneous communication is another commonly used manual method which has some similar features with TC and sometimes is taken as another name for TC. However, SimCom is a different approach that gives priority either to the spoken or the sign language with signed language complement (Haualand & Allen, 2009; Zapien, 1998).

SimCom has several forms and among these, Manually Coded spoken language and Signing Exact spoken language are widely used. In the USA these methods are referred to as Manual Codes for English (MCE) and Signing Exactly English (SEE) (Zapfen, 1998 and Reagan, 2001).

### ***A. Manual Codes for Speech Language***

According to Zapfen (1998), a manual code for spoken language is an artificial system that presents spoken language visually. The sign codes are designed to convey as much as possible about each structure and grammar of the spoken language. Signing the spoken language happened following word order of the speech or the speaking and the signing takes place simultaneously. This method is also known as Signed spoken language. Most of the signs in Signed language have natural sign language origins.

As the scholar suggests, this method is useful to teach the structure of a spoken language. However, it is very hard to speak and sign at the same time, as it is in TC. As a result, when native spoken language speakers sign they tend to leave up to 50% of the signs out of any given statement (Zapfen, 1998). As Zapfen describes, trying to use the signs and speech at the same time means sending a message in neither of them.

Zapfen (1998) notes, in spite of twenty years-worth of refining these systems, Deaf teenagers continue to graduate high school reading at the 3rd to 4th grade level. Literacy has not been significantly improved. This argues that the designed signing systems, then, may not be successful, when success is defined as empowering Deaf students to leave school with literacy and general knowledge at or near the level attained by their hearing peers.

### ***B. Signing Exactly the Spoken Language***

People who use Signing Exactly the Spoken Language speak when they sign. This system is designed to correspond with the number of morphemes (or

smallest units of meaning) of spoken language to sign language. So the word “butterfly” is only one sign because butterfly has one unit of meaning. This method also has its own drawbacks since it tries to use two different languages simultaneously.

#### ***2.5.4. Bilingualism***

Since 1995 bilingualism in Deaf education has become a recognized approach. In this approach, sign language is considered to be the natural language or ‘mother tongue’ that will be acquired as a first language. Spoken language, which is not acquired naturally by Deaf children, will be learned as a second language as the child’s cognitive skills developed (Haualand & Allen, 2009; Grosjean, 2008; Zapien, 1998). Thus bilingual education emphasizes the acquisition of a first language, sign language, alongside the acquisition of spoken languages, primarily in their written form (Zeshan, Vasishta, & Sethna, 2005). The acceptance of these ideas during the last few years brings approval for bilingual education in Deaf education. Especially in Scandinavian countries and the United States, it is highly utilized in many Schools for the Deaf. However there are still a lot of countries which stick to TC (Haualand and Allen, 2009).

As Adoyo (2002) describes, the movement towards sign bilingualism became visible following the linguistic findings that uphold sign language as a bona fide language. Thus sign language’s equal status and the ability to play equal roles as medium of instruction as spoken language becomes obvious. The advocates of the approach also postulated that the underlying proficiency in one language leads to proficiency in the second language. Accordingly, fluency in sign language leads to mastery of one language in the early years. This mastery was later transferred to learning of the second language in school. The fact that sign languages are languages in their own right and that their acquisition catapults a Deaf child’s ability to learn the spoken language on a par with

his/her hearing peers, makes a strong case for the bilingual approach in Deaf education (Grosjean, 2008).

On the other hand, as many scholars suggest, models of bilingual education should be adapted and modified to suit the circumstances of different Deaf children for effective utilization (Haualand and Allen, 2009 referring to Cummins & Swain 1986; Johnson, Liddell & Erting 1989). The scholars' rationale behind this idea is that since Deaf children of hearing parents, who constitute 95% of the Deaf population, do not have access to the acquisition of a first language in their early age, they reach school with restricted linguistic and social preparation. The impact of this on the structure of schooling is that the school must prepare the children for acquisition of a first natural language before second language acquisition, socialization and development of world knowledge. These tasks, generally not undertaken naturally in their infancy at home, will only take place in school. The schools must therefore ensure that under these circumstances, the school environment is linguistically rich to facilitate rapid and easy sign language acquisition while at the same time using it to deliver curriculum content (Haualand and Allen, 2009, Grosjean, 2008; Adoyo, 2002)

Generally, the benefits of sign bilingualism are various and the benefits are getting recognition these days in several schools for the Deaf. It has opened up educational opportunities for the Deaf in many parts of the world, thus enhancing their quality of life. Research also has revealed, by comparing bilinguals and monolinguals, that bilinguals have high cognitive flexibility, are more sensitive to semantic relation among words, and are creative in solving problems (Zeshan, Vasishta, & Sethna, 2005).

## **2.6. Using Sign Language in Classrooms**

Teaching Deaf students and using sign language as medium of instruction requires its own considerations. Classroom adjustments and materials used are among the essential matters that need special attention (Rosy, 2010).

### ***2.6.1. Classroom Organizations***

As Glaser and Lorenazo (2006) describe, since Deaf learners rely on visual input, the classroom should be arranged to facilitate all their visual requirements. Students should be able to see clearly the signed presentation of the teacher, the signed contributions of all the other learners as well as any visuals, such as blackboard, flipcharts, pictures, video materials, and so on. Thus, appropriate seating and lighting adjustments should be ensured in the classrooms. Good lightening is essential to be able to see the signs and facial expressions of the teacher properly. Thus, it is suggested that the teacher stands in front of the students or within close proximity and avoid movement while teaching (Rosy, 2010).

U-shape arrangements of the tables and the chairs, with the teacher and/or interpreter at the open end, are also an important seating structure. The lighting required varies for different classroom activities. For instance, watching a TV screen is easier when the room is darkened, whereas watching live signing requires good lightning. Therefore, it is important to look at the adjustments in classrooms while using a sign language medium (Glaser and Lorenazo, 2006).

### ***2.6.2. Material Availability***

To use sign language in a classroom, it is important to have appropriate materials that support the teaching-learning process. Videotapes, CD-ROMs and other visual materials containing sign language examples provide an alternate form of training materials, as the dynamic nature of a visual language is best shown using images. These sign language resources are also most easily

accessed by learners, provided, of course, that the necessary technology is available to them (Glaser and Lorenazo, 2006).

### **2.7. Language Attitude and its Implications in Education**

People usually have an attitude, either positive or negative, about languages. They may feel one language is expressive and prestigious and the other as immature and has low-status (Burns, Matthews and Nolan-Conroy, 2001). However, from a linguistic point of view, all languages or language varieties are equal in serving the speakers of the language. The attitudes people develop are results of social judgments that manifested the social status of the speakers (Romaine, 1989). Since language attitudes are complex psychological entities, they can influence language use and the choices of a person in different domains.

As Burns, Matthews and Nolan-Conroy (2001) state, language attitudes can have a significant influence on education as well. The attitudes the speakers of a language have are often a basis for choosing the language as a language of teaching and learning. The attitude of the teacher and students towards a certain language is the most important matter in this regard. Especially teachers, according to Burns, Matthews and Nolan-Conroy (Ibid), can play a great role in using certain language in the educational settings.

Research findings shows that many teachers of the Deaf have unconstructive attitudes towards sign language (Burns, Matthews and Nolan-Conroy, 2001). Consequently, they can exhibit inappropriate language use in schools. On the other hand, the majority of Deaf children enter school with no language. If they cannot find efficient teachers who have positive attitude towards the language to train them with the language, they usually build up poor sign language proficiency. Incapability to express their ideas properly usually leads the students to develop a negative attitude towards sign language, thinking it is unqualified of expressing abstract ideas (ibid).

For example, research conducted at Gallaudet University shows that the students in the university associated using particular sign systems with the status of the users and have developed certain language attitudes following that. As the study indicated, American Sign Language (ASL) users are taken as less educated Deaf and the Deaf who use Manually Coded English or Signed English are considered as highly educated (Kannapell, 1989 Cited in Burns, Matthews and Nolan-Conroy, 2001). Another study done in Ireland also can be evidence for such an attitude among Deaf students (McDonnell, 1992 cited in Burns, Matthews and Nolan-Conroy, 2001). Students there placed great importance on the acquisitions of oral language skills and 75% of the students preferred placements in classes that employ oral languages as the only medium. As mentioned in the study, many students think that signing has a negative impact on spoken language learning, though there was a considerable difference between the views of the profoundly Deaf and hard of hearing students. However these views were reflected with regard to using sign language for education. In other communications, sign language is prevalent among the Deaf students.

These negative attitudes towards sign languages should be changed to utilize it in education effectively. As Burns, Matthews and Nolan-Conroy (2001) suggest by referring different research findings, there is a need for radical change in language practices at schools for the Deaf. They also recommend shifting people's attitude and beliefs towards the Deaf and their language. As many studies show, the overall level of achievement of Deaf children is limited in oral communication, with low level of attainments in reading and writing. Therefore for it is obligatory to advocate natural sign language's employment in classrooms.

## **2.8. Sign Language and Deaf Education in Ethiopia**

As it is discussed in previous topics, using sign language in Deaf education is a pedagogically, linguistically and psychologically sound practice. It is also an issue of human and linguistic rights, since sign language is the mother tongue of Deaf children. Having this in mind, the history of employing sign language in education and the current situation in Ethiopia in the area are overviewed.

Deaf education was out of the scope of the society in Ethiopia before the First School for the Deaf opened in 1964 (Hailu, 2003 and Reynolds & Fletcher-Janzen, 2007). Before that there was a school established by Finnish missionaries in the former province of Ethiopia, Eritrea, in the 1950s (Reynolds and Fletcher-Janzen, 2007). However this school was not recognized by the government of the time. According to the Encyclopedia of Special Education (Reynolds and Fletcher-Janzen, 2007), the Keren School for the Deaf was the only school since the Church of Christ established Mekanissa School for the Deaf in Addis Ababa and its branch in Mazonia, Senteria. Following that, the Baptist Mission founded the Alpha School for the Deaf in Addis Ababa in 1967. Hosana School, as one of the pioneer schools for the Deaf, was also established in 1981.

In all the schools, the missionaries bring the dominant Deaf education approaches and sign language of their respective countries to educate the Deaf in Ethiopia (Alemayehu, 2004). SimCom and TC were the main modes of communication in the schools (Hailu, 2003), although there was an attempt to promote Oralism in Alpha School for the Deaf for a few years. Except that minor attempt, American Sign Language was used as a medium of education together with English until 1969 in the schools.

In 1969 the sign language started to be combined with Amharic. Consequently, the first Ethiopian Sign Language (EthSL) book produced in 1978 with written Amharic captioning (Hailu, 2003) and also a few other activities for developing the language started to appear.

In summary, the Deaf education and employment of sign language in their education, which was started by foreign missionaries, began to get attention through time from Ethiopians and government bodies until it reached its current level (Alemayehu, 2004; Hailu, 2003).

The practices in the country also show the increasing recognition of special needs of Deaf learners. The number of schools for the Deaf which use sign language was not more than 10 before the year 2000. By the year 2007, there were about 87 primary schools that have special classes (units) for Deaf student up to grade four and 14 specialized Deaf schools all over Ethiopia. The teachers training colleges in each region also train teachers in EthSL in their departments of special needs education. Sign language is incorporated in the programs as part of a course (Alemayehu, 2007). This could be considered as one indicator of the rising emphasis on Deaf education.

The Education and Training Policy (1994) give particular attention in regard to materials preparation and utilization to support special education. As a step toward realizing that goal, the first modern and specialized Ethiopian Sign Language Dictionary was published by ENAD in 2008.

Apart from the emphasis given to make schools accessible for the Deaf, many scholars suggest giving adequate attention to the quality of their edification. As Alemayehu (2000) suggests that having qualified teachers who are trained well in Ethiopian Sign Language and the subject matter they are teaching is among the very crucial components to bring the required quality. The adoption of appropriate policies and approaches in Deaf education is the other issue raised by Alemayehu (ibid). He, along with the Ethiopian National Association for the Deaf (ENAD), argues against the way inclusive education promoted by Ministry of Education of Ethiopia as well as the UN in the past decade. In his article, while mentioning the advantages of inclusion, he states its impracticality in the

Ethiopian situation due to poor facilitation in most public schools. Lack of trained teachers, sign language interpreters, materials that could support the Deaf students, text books on Ethiopian Sign Language, and poorly equipped classrooms are among the obstacles to educating the Deaf with the required quality.

## **CHAPTER THREE**

### **3. RESEARCH METHODOLOGY**

This chapter deals with the methodological issues of the study. Thus, issues related to the research design and their procedures are discussed in detail.

#### **3.1. Research Design and Methods**

Since the research intended to explore sign language as a medium of education at the primary school level, qualitative research design is employed to achieve the goals. Qualitative design is chosen because it can allow a through look at the issue. Creswell (2007: 51) explains the significance of a qualitative approach:

A qualitative approach is an appropriate to use to study a research problem when the problem needs to be explored: when a complex, detailed understanding is needed; when the researcher wants to write in a literary, flexible style; and when the researcher seeks to understand the context or setting of participants.

Therefore, to explore how sign language is used as MOI at the primary school level together with its context of application in detail, the study makes use of qualitative design.

Among the various qualitative research designs, the *case study* research method is selected and utilized for this study. As Creswell (2009) explains, this method gives a way to explore in depth a program, activity, or process. Creswell adds by referring Stake (1995), the researcher gains a chance to collect detailed information about in what way or for what reason things happened through a variety of data collection methods. In line with this Yin (2003) says: “. . . case studies are the preferred strategy when ‘how’ or ‘why’ questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within the real-life context.”

Accordingly this study uses a case study strategy to explore how sign language is employed as language of teaching and learning focusing on specific classes. Activities carried out and the process of using sign language as a medium is evaluated, since the strategy allows doing so by gathering information from various sources.

### **3.2. Sources of Data and their selection**

In a case study research it is very common to use multiple sources of data (Creswell, 2007). Hence a variety of sources are utilized to achieve the objectives of this study. Both primary and secondary sources are engaged in the process.

The major primary sources in the study are students and teachers. The school director, parents, Ministry of Education and Addis Ababa Region Education Bureau special needs unit focal persons are among the primary informants as well.

To explore the employment of sign language as the language of teaching and learning at a primary grade level, the selection of specific cases and sources has been done thoroughly. Source selection is started by deciding on the school. Mekanissa School for the Deaf is taken as the site of the study. The school was selected purposefully, since it is one of the senior deaf schools in the country. The researcher believes looking at the practice of the school which has had better experience helps to understand the level sign language employment in education reached on at its best. Before conducting this study the researcher visited almost all schools for the Deaf in Addis. With that preliminary assessment, it could be understood the school appeared to be the best from all. Subsequently, the researcher assumed examining the practice at this school, could be a foundation for further researches in other schools and also to take corrective measures in the area.

The grade levels in focus also were chosen purposefully. Two classes of primary first cycle grades are taken as cases. Language use for primary education is a critical issue to be addressed since it has either a facilitating or hindering effect on learning (Heugh and Others, 2007). That is why grade one and two classroom language use is examined. On the other hand, all primary, first cycle classes are not included so that this study can be more focused and detailed.

Policy documents and students note books, in addition, serve as secondary data sources for the study.

### **3.2.1. Students**

2010/11 academic year grade one and two students of Mekanissa School for the Deaf are subjects of the study. There are 50 Deaf, hard of hearing and hearing students in the two grades. From 24 grade one students there are 16 deaf and hard of hearing as well as 8 hearing students. From 26 students in grade two, there are 18 students who are either deaf or hard of hearing while 8 students in the class are hearing. These students' activities related to language use in the classrooms were observed.

### **3.2.2. Teachers**

Seven teachers who teach five subjects in the two grades are chosen for the study. The teachers were observed while conducting Mathematics, Environmental Science, Lip-reading, Amharic and Sign Language subjects. The subject matter selection was done following their fundamentality for the grade level, except for the English language. English is not included in the study, because the researcher believes the case in second language learning could be seen through Amharic subject teaching and learning.

Teachers of the above mentioned subjects are interviewed as well as observed to be sources and to impart information on the teaching-learning process in which sign language is a medium.

### **3.2.3. Parents**

Ten parents of the deaf and hard of hearing students are the other sources of information. These parents were selected based on their availability specifically to get information about their attitude towards sign language as a medium of educating their Deaf children and related matters. Since I need more detailed information on the issue their number is limited to ten to make the data manageable.

### **3.2.3. School Principal and Other Officials**

A school principal, regional education bureau and the Ministry of Education special needs unit focal person also serve as informants. These officials were selected purposefully, since they have a direct relation with the research problem.

Mekanissa School for the Deaf director is one of them. The director was selected as a resource person as he is the one in charge of explaining the school philosophy regarding sign language use and other experience in deaf education at school level.

The focal person for special needs education at the Ministry of Education (MoE), was also selected to give information on policies and practical situations on a national level.

The other official serves as a special needs education expert at the Addis Ababa Region Education Bureau before the current restructuring. This official is interviewed since a new focal person for special needs education is not assigned at the region level while this study conducted. Hence, the researcher was forced to interview this former official as an informant. In that he imparts very useful information on issues related to regional policy and strategy about sign language use in education.

### **3.2.5. Documents**

Policy documents that can serve the purposes of this research are the 2002 Education and Training Policy and the 2006 Special Needs Education Program Strategy. Though the researcher expected to have different policy documents at different levels, these two documents are the only ones found discussing language in education issues. These manuscripts are used in the study as a reference of evaluation for some practical issues.

The notebooks of randomly selected students', on the other hand, were reviewed to get additional information about the students' competence in the medium of instruction.

### **3.3. Data Collection and Instruments**

In the case study, data was collected from the primary and secondary sources through different instruments to go with the different natures of the informants. The main data collection tools are classroom observation, in-depth interview and document analysis.

#### **3.3.1. Classroom Observation**

A total of 20 classroom observations have been done throughout a semester to get enough information about sign language employment as medium of instruction. In each group, 10 formal observations have been done on randomly selected distinct days. The teachers-students classroom interactions were observed at least twice in each subject. The formal observations guided by the checklist developed for this purpose by the researcher. Though, it was planned to use video camera during the class observation, the researcher limited to use only note taking as data collection instrument due to budget constraints. The researcher used trained sign language interpreter as assistant in the observation to fill communication gaps.

The observations help to identify which Deaf education approaches are practiced in classroom, in addition to verifying the information gathered through other data collection methods and sources. Important information on the organization of the classrooms and their suitability to use sign language as a medium also were gathered via the observations. The teaching-learning process, student-teacher and student-student interactions with regard to language use in classrooms were all observed from the beginning to the end of each session. Students' and teachers' competence with the medium also were evaluated in reference to the observed facts in the class teaching-learning process.

### ***3.3.2. In-Depth Interview***

In addition to the observations, in-depth interviews have been done with the seven subject teachers and ten students. With the interview supplementary and detailed information is gathered that answers the research questions.

Besides, ten students' parents are questioned in detail about their attitude towards sign language instruction education of their children.

In-depth interviews were also done with one school director, education bureau officer and the MOE special needs education expert about policy implementation issues.

All the interviews have been guided by semi-structured interview questions while tape recorder and note-taking used as instruments for the data collection. In addition interpreter has been employed to mediate while the researcher presents the questions for interviewees in appropriate languages.

### ***3.3.3. Document Analysis***

Articles of the Education and Training Policy, Special Needs Education Program Strategy, and other legal document which deal with language use in education

were analyzed as additional sources of reference. The articles were analyzed to be used as reference for some practical issues.

In addition, ten randomly selected students' notebooks were examined to get supplementary information about how the students are grasping the intended content with the sign language medium.

### **3.4. Data Analysis and Presentation**

The data collected from different sources by using classroom observation, interview and document analysis were analyzed and presented using the qualitative narrative method. The narrative method selected since it can help to show the practices and understand several aspects of the language uses in the classes under study.

In the last four decades, the use of narrative analysis as a well suited entry into understanding of the multifaceted aspects of human life—social, cultural, political, psychological—has gained a wide currency in the interdisciplinary fields of the social and human sciences, including sociolinguistics and education. The growing interest in narrative is based on the common recognition of narrative as the most important mode of knowledge and communication whereby human life, experiences, actions and thoughts are organized and reflected on (Hinchman and Hinchman 2001).

For analysis, among the data collected about sign language use in Deaf education the only believed to be appropriate to serve the purpose of the study were selected. The appropriateness of the information measured with its relevance to the issue of sign language use in grade one and two of Mekanissa School for the Deaf. These selected issues are categorized and presented as different but interrelated topics.

The Deaf communication approaches employed, language of instruction, classroom organizations, material availability, proficiency in the MOI and attitude towards the MOI are the major issues raised in relation to sign language use in Deaf education. Thus, the themes were taken as the main focuses of analysis and presentation in addition to the challenges and opportunities observed in using sign language as MOI. Under each theme, the data gathered from classroom observations, interviews and document analysis were systematically presented and analyzed to yield justifiable generalizations of the study.

Under the theme ***Deaf communication approaches*** the data that have relevance to show what communication approaches and how they employed in the classes are presented. From several data in this theme information that has direct relation with language use are selected and analyzed for the purpose of this study.

***Medium of Instruction (MOI)*** employed in the classes is the other theme for analysis. Under this data that could show what languages used in the classes, for which classroom activities and how presented and analyzed.

***Classroom organizations and material availability*** is the other focus to show how sign language employment looks like in the classes under study. In this regard from several issues that can be raised in classroom arrangements and materials requirements for Deaf learners, only things that directly linked to the sign language use are selected and analyzed.

The other important issue in language use in education is ***competences of the teachers and students in the MOI***. Thus data that can be evidence for the competences of the teachers and the students get analyzed. Since the study focuses in classroom language use, the data only from the observations and the interviews are presented under this topic.

***Attitude towards a MOI*** is one of the essential issues to use certain language in education. In line with this, the theme was also taken as a focus of analysis. Data that can show the attitude of teachers, students, and parents to use sign language as MOI presented and selected under this topic.

Apart from these, the main challenges and opportunities in the classes under study to use sign language as medium of teaching and learning were identified and presented.

Following these data presentations and analysis, the findings of the data provided. The report also incorporated the conclusions from the findings and some practical recommendations.

## **CHAPTER FOUR**

### **4. DATA ANALYSIS, PRESENTATION AND FINDINGS**

In order to evaluate sign language employment as the medium of instruction at Makanissa School for the Deaf primary classes, the research has employed several data collection techniques and gathered data from different sources. In this chapter the data are analyzed and presented with the findings, and the background of the school is discussed primarily. In the next part of this section, the data are presented and analyzed, to be followed by discussion of the findings.

#### **4.1. Background of Makanissa School for the Deaf**

Makanissa School for the Deaf is a special school which enrolls Deaf students and their siblings mainly. It is found in Addis Ababa in the place called Makanissa. The school is the pioneer school for the Deaf in Ethiopia, established by American missionaries in 1964. The founders, Church of Christ missionaries, came to Ethiopia in 1961 and conducted a needs assessment survey regarding special needs education in the country. After surveying the absence of access to education for the Deaf, they founded the Makanissa School for the Deaf with the permission of the government.

Carl Thompson and Gerry Blake were the founders and the first teachers in the school. As people who know the school starting from its establishment say, it was challenge full to educate the Deaf in Ethiopia at the beginning. Parents of the Deaf never considered that their children were capable of pursuing education. Instead, they used to make them do excessive work around the home. The Makanissa School for the Deaf started teaching by gathering such children from all over Ethiopia, and using sign language as the medium of instruction together with English.

The school started with three students, and has provided educational opportunities for more than 5000 Deaf and hard of hearing students and 3000 siblings of the Deaf until the 2009/2010 academic year.

In this academic year the school enrolls 273 students in levels from kindergarten to grade eight. Of the 273 students, 178 are Deaf and hard of hearing and 95 of the students are hearing that are relatives of the Deaf students. There are 16 teachers and 14 administrative workers to support the students in the school.

Makanissa School for the Deaf as a special school that mainly serves Deaf learners; it focuses on making education accessible for the Deaf. The teachers' qualification, classroom arrangements, material availability, the language skills of supporting staffs, and so on set in the school taking into account the educational needs of the Deaf students to its level best.

## **4.2. Data Analysis And Presentation**

The data collected from classroom observations, interviews done with teachers, students, parents, and other officials as well as document analysis merge together and present in this section. The analysis focuses on examining the language used as the MOI in the classes under study and how it served for teaching and learning in the classrooms. The presentation of the data is started by describing the basic data of the research subjects that have relevance to this study.

### **4.2.1. Bios of the Research Subjects**

The subjects of this study are grade one and two students at the Makanissa School for the Deaf who are enrolled in the 2010/2011 academic year. This includes 24 grade one and 26 grade two students who are obtaining their education in the school. In grade one there are 16 Deaf and hard of hearing as well as 8 hearing students. In the class, female students take the lion's share. On the other hand, out of 26 students in grade two 18 students are either Deaf

or hard of hearing while 8 students in the class are hearing. In contrast with the grade one students, there are more male students than females in grade two. These students were observed while they learned in the classrooms to gather information about sign language utilization in their teaching-learning process.

The other subjects of this study are teachers who teach Mathematics, Environmental Science, Lip-reading, Amharic and Ethiopian Sign Language subjects in the two grades. The teachers from each class were observed and interviewed to collect information on the issue under study. A total of seven teachers were involved in this research; of these, only a single teacher is Deaf. With regard to their qualification, it ranges from 12 complete teachers to diploma holders. Two teachers are 12 grade graduates with more than 30 years experience in Deaf teaching. One has a diploma in language teaching with 14 years experience in teaching the Deaf. The rest have a certificate in either teaching first cycle students or special needs education; of these, most have a diploma in other fields or are perusing their education to obtain a Diploma. The experience of the certificate holders ranges between a few months up to seven years.

Ten parents of grade one and two students were interviewed to evaluate their attitude towards the medium used in their children's education as well. The education level of these parents ranges from illiterates to well educate who have a first degree. Three of them never went to school; five of them were educated up to grade 10 and 12, while the rest are first degree holders.

#### **4.2.2. Deaf communication Approaches Employed in the Classes**

As data from different sources shows, the communication approach Mekanissa School for the Deaf is trying to follow is still TC. As the director of the school pointed out in his interview, they are using the approach generally in the school and in grade one and two particularly. The director also made known there is no written document or policy that deals with the issue at the school

level yet. However the so called TC has been acting as the de facto policy to guide the educational communication in each class.

The majority of the teachers interviewed for this study also confirmed that TC is the approach they are following, though two of them have no idea about what approach they are really following. The teachers who didn't have a clear idea about the communication mode they are using, said "we just follow the tradition we have seen from senior staff to teach in class," which is described by others as TC.

As six of the teachers described, in the system they use the teacher signs following his/her Amharic or the student interpreter signs while the teacher speaks in Amharic. The classroom observations also confirmed this is the way most teachers communicated the curriculum contents for their students.

In principle, TC is a method which incorporates different kinds of communication: sign language, voice, finger spelling, lip-reading, amplification, writing, gesture, facial expressions and other visuals (Haualand & Allen, 2009, Glaser & Lorenazo, 2006 and Zapien, 1998). With this consideration, it is hard to classify the method employed in the classes under study as TC.

As it is reflected in more than 16 classroom observations and in the teachers' interviews, there were not enough inputs that made the communication mode in use TC. In 85 percent of the sessions, there were no other communication modes employed except Manual Codes for Amharic and few Signing Exactly Amharic, which are different forms of SimCom. Only in three sessions were there attempts to incorporate different communication modes to provide preferences for different learners' need. Different modes incorporated by the two teachers were sign language, finger spelling, lip-reading, gesture, demonstrations and pictures to teach new vocabulary. One of these teachers especially was trying to use the natural sign language together with other modes of communication. However, except in the cases mentioned, all

exhibited the use of solo signed language or manual codes for Amharic dominantly.

It is also learned from the interviews, the teachers did not have appropriate information about different communication modes that can be used in classes where Deaf students dominated. None could differentiate TC and SimCom. They rather thought the two modes are one and the same. They also make known that they are not aware of the differences between using natural sign language, Manually Coded Amharic or Signing Exact Amharic. Therefore they do not believe that the communication mode they are using is something that should be examined.

In addition, all teachers, except one reflected that the 'TC' they are using is the best way since it combines sign and speech to give options for learners. Only one teacher was aware of the failures in TC as a communication mode for Deaf learners. However, that teacher also used it in classes so as not to break the status quo in the school. The rest strongly believed it is the best mode of communication to educate Deaf learners as well as hearing students who learn with them.

However, five Deaf students interviewed for this study expressed their difficulty to communicate properly in such mode. Only two hard of hearing students are comfortable with the mode, while three students noted their comfort is more dependent on the teachers' proficiency in the sign language than the communication mode.

Introducing the Deaf children to both the hearing and the Deaf world was the other reason behind using sign language and speech simultaneously by the teachers as they explained. However what they want to achieve can be achieved in the bilingual approach with better efficiency. As to this approach, natural sign language should be acquired as a first language and the spoken language as a second language primarily in its written form by Deaf learners (Haualand & Allen, 2009; Grosjean, 2008; Zapien, 1998). Therefore it is possible to make

the Deaf children properly bilingual and bicultural since basic proficiency in sign language leads to proficiency in the second language, which is Amharic in this case.

#### **4.2.3. Medium of Instruction (MOI) Employed in the Classrooms**

The data drawn together from the classroom observation and the interviews evidenced that Signed Amharic is the predominate language of teaching and learning in the grades under study. Though scholars suggest that the medium of instruction ought to be natural sign language, the natural EthSL is rarely used solely as MOI in the classes observed because the teachers believed the language is incapable to mediate education. Thus, the Signed Amharic, which is an artificial language governed by spoken Amharic structural rules, engaged in many classroom activities. Written and spoken Amharic was also employed in few of the classroom activities.

From seven observed teachers, six employed Signed Amharic or Manual Codes for Amharic dominantly in their teaching. In these cases the teachers' voices was on while signing simultaneously following the structural and grammatical rules of Amharic. Basically, because the two languages are not one and the same they couldn't have identical structures and grammatical compositions. As a result, it was difficult to match every single Amharic word and utterances in sign. The data from observations also confirmed many utterances were either underrepresented or overrepresented by the signs, since it is very difficult to use two languages evenly with complete and analogous matching. These inequalities in the structure also observed as they lead to inequality with meaning and message somehow.

For example, definite markers that are suffixes on the Amharic nouns were rarely represented by the sign. Thus, the teachers were using the similar sign for the Amharic words ቤት and ቤቶ, ልጅ and ልጆች, ልጅ and ልጆች etc. Analogous misrepresentation also was observed on verbs. Thus, the identical signs were used for ለገባ ለገባችን and ለገባ, ለገባችን and ለገባችን, ለገባችን and ለገባችን,

etc. These identical signs were not carrying identical meaning and message. Especially, the quality of the messages conveyed for sign language users were in question.

Similarly prepositions like ‘በ በ በ’ were left unsigned and the message with the spoken Amharic and the sign were not equivalent as it was observed in the sentences that were used in the classes: ‘በ በ በ በ በ በ በ በ’, ‘በ በ በ በ በ በ በ በ በ በ በ በ’, ‘በ በ በ በ በ በ በ በ’.

In some situations it is observed that the teachers gave additional signs and clarifications to make clear some unsigned meaningful components and words. Representing some prepositions by artificial codes (signs) was observed as it was done for በ በ በ and the like to bring equivalence in the two languages. Because such signs were artificially designed to fit such purposes, they didn’t appear in the natural EthSL.

There were also several Amharic sentences which required several signs than expected to be represented fully. In that ‘በ በ በ በ’, for example, represented by the signs of ‘LUNCH’, ‘EAT’ and ‘FINISHED’ (i.e. the additional signs which show the action is already done) and ‘T’ (i.e. to show the subject of the sentence). In these a sentence which contains only two words represented by four signs to be able to pass equivalent message in the two languages- Amharic and sign. Such inequality in grammatical structures appeared to be troubles to make use of the two languages side by side simultaneously.

Generally the mismatches were observed in a number of sentences since it is very difficult to use two languages at a time equivalently. Above all the structural and grammatical differences that existed between Amharic and the natural EthSL is hardly compromised.

Despite these facts the Signed Amharic was used mainly to lecture by 71% of the teachers. 14% of teachers employed spoken Amharic with student interpreters. The remaining 14% use voice-off Amharic (lip movement) with

EthSL and Exactly Sign Amharic in which the Amharic followed the structure and grammar of the EthSL.

The teachers applied the same languages and mode of communication to question students, though there were some modifications while the interrogation takes place individually. During personal questioning the teachers showed a tendency to use either the Exactly Sign Amharic or Manually Coded Amharic depending on the students' hearing status. It was observed that most teachers attempted to use Signed Exactly Amharic for questioning the Deaf where they inclined or shifted to spoken Amharic and Manually Coded Amharic if the student was hearing. It was identified from the interviews with the teachers; however, they did the inclination unconsciously.

The students, similarly, exhibited an inclination to use their mother tongue/first language for questioning and answering. Thus Deaf students learned to use EthSL only, while the hearing made use of SimCom with more inclination to the spoken Amharic. The same procedure applied for formal or informal discussion between the students themselves.

All the written tasks, on the other hand, were carried out in the written Amharic medium. For written class works, reading and lecture note taking activities the written Amharic was served as language of instruction.

In the observed classes, spoken Amharic dominated as the language of classroom administration. Teachers and student monitors slanted to speech in most of the sessions to direct and control all students in the class. Except the Deaf teacher, others tended to use Spoken Amharic to control inattentive students. In a situation, the hearing classmates reiterated or showed by signs what the teacher has been saying for their Deaf classmates. Alternatively, the teachers used gesture, body contacts, lip-movements, and demonstrations to call for attention, give direction and impart messages to the students. Student monitors employed similar methods to support the teachers in the classroom management activities.

To sum up, Signed Amharic which is artificially coded language was the dominant MOI in grade one and two at Mekanissa School for the Deaf. The language was not the mother tongue of the Deaf, hard of hearing or hearing students though they were used as an instrument of lecturing, questioning, answering, discussing as well as administering the class. However, many research findings show that students can perform better at school when they learn through their mother tongue or first language (Heugh and Others, 2007; Kosonen, 2009). In contrast, the artificially coded language employed in the classes is not a mother tongue of any of the children. Deaf students especially were learning in a language they hardly understood.

#### **4.2.4. Competence of the Teacher and Students in the MOI**

A language which can serve for educational mediation is expected to be well understood by both the teacher and the students in the class. Thus the students and the teachers should have the required proficiency in the language that will be used as MOI. In line with this, the competence of the teachers and the students in the grades under study is examined in this subsection.

##### **4.2.4.1. Teachers Competence**

Except the born Deaf teacher, the EthSL is a second language for all teachers under study, while Amharic is their first or one of their first languages. Of these, two of them learned sign by living in the Deaf community. The rest trained through in-service and pre-service preparation when they started teaching Deaf students.

With the experience they have in educating the Deaf and using EthSL, all except one believe that they are proficient in the language. They also reflected that they are skilled in using EthSL and Amharic simultaneously (Signed Amharic) for teaching and learning.

However the data from classroom observations showed that only two teachers have enough vocabulary of EthSL to use it in combination with the Amharic,

regardless of the failure in the system of Signed Amharic. When the teachers were asked about this contrast, they responded that they lacked the ability to express some ideas via sign because the language lacks vocabulary and is inefficient to be a medium of teaching and learning.

As to all teachers' opinion, the natural sign language is incapable of explaining the subject matters efficiently. As a result, they face difficulties in explaining some topics, specifically in sign, while they use Signed Amharic. The teachers believed that the EthSL is incapable to mediate education even at the primary level.

In the interviews, 85% of the teachers explained that they employ different strategies like using synonym signs, examples, drawings, demonstrations, to complement what the language lacks. Only one teacher said "*I tried to create new signs to express new concepts.*" However, it is observed, they typically used spoken Amharic and finger spelling whenever they lacked the vocabulary though this could convey educational information hardly. The teachers were observed when they employed the above-mentioned concretizing strategies only in few cases.

The only teacher with few months contact with the sign language and confirmed as he lack proficiency in sign language was taking training to improve his skills. Since he was conducting classes in the meantime, he used student interpreters to support him with the interpretation. As he stated during the interview, he believed that the students could interpret perfectly. Observation of his sessions demonstrated, however, almost all interpretations were inaccurate. Because of the students' poor proficiency in the language, in addition to their lack of professionalism in interpreting, their mediation was obstructive. Above all there should be ethical considerations in using students as interpreters during their learning time.

#### **4.2.4.2. Students Competence**

The students' under study were also observed as they face difficulties in using the languages as medium of learning. Significant numbers of Deaf students could hardly express their ideas and understand what had been said in the classes via Signed Amharic.

As the teachers explained, the reason behind the students' incompetence is related to their language acquisition largely. Almost all Deaf students learned language at school. From these several joined the school at a very late age. As a result, they faced difficulty in acquiring the languages at the required pace. Literature also supports the idea that late language acquisition can affect the acquisition pace of a child (Woll, 1998). As Woll states, children who do not acquire fluency in a first language by age of five face difficulty to catch up either in sign or spoken language. Reagan (2008) also adds that early language acquisition- sign language- is essential to any child for cognitive and skill developments, and for later literacy skills acquisition.

Apart from the age, the teachers also explained that the large number of students in a class is another challenge to follow up each student's language acquisition progress at lower grade levels. Accordingly many of them might develop poor language proficiency and negative attitude towards the language.

The problem with the language itself was the other factor believed to be a barrier by some teachers. Those teachers judged the natural EthSL as an inadequate language to express concepts fully in. Thus the Deaf students cannot express their ideas using the natural sign language or signed language.

It is also observed that there were only a few students who could properly use the sign language to question, answer and discuss in classroom activities. These few students and the hearing students in the classes were able to understand lectures, questions, instructions and act accordingly. The majority of the students in these classes hardly followed instructions.

As the senior teachers made out, especially instructions in written Amharic were almost impossible to be understood by the Deaf learners. Every instruction had to be explained again and again to make it clear for the students in the Signed Amharic. Additionally, the experienced teachers were aware of that only short and precise instructions worked for the Deaf students in the classes. One of the seniors also added, “*Working the first question or task in the activities as an example is very crucial to make understandable what is required from them.*”

One of the instances in observation, which is stated below, can substantiate the problem of the students’ competence in understanding written Amharic medium instructions.

One of the junior teachers gave written exercise without detailed explanations. The instruction read as follow: “□□□□□□ □□□□ □□□□□ □□□□ □□ □□□ □□□ □□ □□” (*Read the questions below and write the appropriate answer in the space provided*) and there are about five questions under it that require short answers on the spaces. The researcher looked at five students’ exercise books after a few minutes to test out how they did it. What four of the students wrote was totally unrelated to the instructions. One of these students put the words in the instruction in the spaces provided. That means “□□□□□□”(the following) given as an answer for the first question, “□□□□□” (questions) for the second, “□□□□□□” (read) for the third one and continued like this. The other two students wrote on the spaces “□□□□□”/ “□□□□” (true or false) as answers. The one remaining student put Amharic letters in the spaces given. Only one student gave answers that went with the instructions. The teacher gave explanations and individual support after observing most of the Deaf students did not understand the instructions. Thereafter many of them started working properly.

The same lack of understanding was observed while the students were questioned orally or by sign in almost all the sessions observed. Some senior

staff under study employed repetition, contextual explanation and doing some part of the tasks as examples to overcome the problems created by language barriers.

Generally from many of the class observations as well as interviews with teachers and the students' exercise book analysis it is learned that the competence of the students in both MOI- Signed Amharic and written Amharic is under question. In almost all classes it is observed that the Deaf students especially have proficiency neither in EthSL nor in Amharic to express their ideas and receive information that is useful in their learning settings. The hearing and hard of hearing students in the classes, however, exhibited better educational communication in the sessions observed.

#### **4.2.5. Classroom Organization and Materials Availability**

Grade one and two students' teaching and learning was taking place in about 2 by 3 meter small rooms. In these rooms there were 24 and 26 students in respective classes. There were about 10 school desks in each class in three rows. Two or three students were sited at every desk showing their backs to students behind them. The room had only one small window to pass in light and air. No electric lights were on during the observed sessions. There were no teaching aids and materials posted on the white wall except the blackboard.

After observing these situations, the teachers who were teaching these classes questioned about the suitability of the rooms to teach using the media they were employing. All the teachers confirmed that they were not comfortable to teach in the classes with their current conditions. They mentioned the narrowness, lack of enough space to move around, darkness, suffocation and the seating arrangements as the main problems in the classrooms.

Though, students should be able to see clearly the signed presentation of the teachers, other learners and visuals like blackboard, most of these things were violated in the classes under study. Good lighting was among the essential

matters to be able to see the signs and expressions on the face of the teacher properly. However, as all the teachers and the students pointed out, the students were facing problems to follow up the teachers' sign and things written on the blackboard properly because the classes were dark. Though the school tried to fix this problem every time, they could not get a sustainable solution yet. The students commonly stood up whenever they could not identify the teachers' sign as they sat. The teachers explained this usually created a disturbance in the class because one student blocked the other one at the back while standing.

Scholars suggest that teachers stand in front of the Deaf students or within close proximity and also to avoid movements while teaching (Rosy, 2010). However, during the observations many of the teachers were moving here and there, and also gave their backs to the students to write on the blackboard while lecturing.

In addition, the seating arrangements were not comfortable and have the potential to hinder the proper application of sign language as a medium of education. Unlike other languages it is difficult to convey messages via sign language if there is no eye contact. Nevertheless the seating arrangements in the two classes seemed to forget this fact. As the teachers confirmed and as observed by the researcher, the students didn't sit facing each other in the classes. The teachers and interpreters were the only ones who stood in front of the students and were comfortable to see everyone's sign in the room. The observation data revealed that the students were usually forced to turn back and forth when they need to see what others were saying or/and signing.

The seating arrangements were all the same for different classroom activities as the observation data showed. Seating arrangements like placing the tables and chairs in a U-shape or semi-circle, with the teacher and/or interpreter at the open end, were not functional in the cases.

Apart from this, all of the teachers criticized the narrowness of the rooms because they were uncomfortable to follow up with each student and provide individual support and administration by getting closer to everyone.

The other important facilities expected in classrooms which encompass Deaf learners are visual materials. Unfortunately, it was observed, materials like pictures, charts, video prepared with sign language, and motion pictures, were rarely used in both classes. Only in three lessons did the teachers bring pictures to classes to aid their lectures in signed language. When the teachers were asked why they fail to have visual materials in the classes either permanently or temporarily, 85% of them answered it was because materials scarcity and unavailability in the school. The rest of the teachers explained that they used the pictures and charts whenever necessary. On the other hand, there were lessons observed that could be aided by bringing the real objects in the classes like lessons about flowers and new vocabulary study. Though some teachers responded as they bring such visual aids into classes, all students' replied this seldom happened in their cases.

The other visual element mentioned other than the visual aids in the rooms situations were the wall paint. As a teacher pointed out, the white paint of the walls is obtrusive to follow the sign presentation by the learners in the classes since it didn't have apposite contrast with the teachers' white gowns. The teacher explained, "*for visual learners it is important to consider every paintings and materials in their classroom since they are sensitive for visual things.*" But many of the teachers did not mention this.

#### **4.2.6. Attitude Towards Sign Language MOI**

Attitudes can influence language use and choice of a person in different domains including education. In light with this, the data about the attitude of students, their teachers as well as parents presented here.

#### **4.2.6.1. Students' Attitudes**

The majority of the students in the classes learn sign language in the school. All interviewed grade one and two students conveyed that they have positive attitude about EthSL as a language. On the other hand, these students' outlook about using the language as MOI is different. The responses of all the students showed that they considered the sign language they are using to be inferior to the spoken languages like Amharic and English in education. As they confirmed when questioned about the efficiency of the language to be a language of education, they believed the language is inefficient and incapable of expressing the concepts of different school subjects. All interviewed students also did not believe that sign language can express everything as Amharic or English did.

Though the students could not put in plain words the rationale behind their attitude, as one of the teachers suggest their lack of proficiency in the sign language could be one reason to develop such a downcast outlook. Scholars (Burns, Matthews and Nolan-Conroy 2001) also confirmed that poor proficiency of students to express ideas properly can be one reason which leads to the development of a negative attitude towards a sign language, thinking it is unqualified to express ideas properly.

The teachers also raised other consequential grounds that might lead the learners to develop unconstructive attitudes towards using the language in their education. One of these was students' delay to join schools since it is a time to learn their first language. As the teachers verified and as was practically observed in the classrooms, many of the Deaf and hard of hearing students in both grades were more than 12 years old. This exceeds the average ages of a child to join grade one and two by five and four years respectively. This delay to acquire the first language by the Deaf learners is suspected as a cause to develop poor proficiency in a language as well as a negative attitude about the capability of the language itself.

The way the students learned both sign language and Amharic was also raised as a possible hindrance in their efficiency and attitude. From observed language sessions it could be understood that the language teachers did not appear to be aware of language elements that are important in language teaching like the grammar of the languages. The teachers' attitudes about the capability of sign language as a medium of instruction itself could be one root factor for the students' attitude.

The data from interviews also showed that only a few families support their children in using sign language at home. This also could have its own influence in the students' attitude. As students and teachers mentioned, many parents didn't provide enough support for their child to use the language at home. These parents felt that sign language that is serving as the MOI in their children's education because there was no other option, not because it is capable of mediate teaching and learning processes.

#### ***4.2.6.2. Teachers' Attitude***

Teachers' attitudes can affect the use of certain language in classrooms significantly. Correspondingly the teachers under study were in a position to influence the employment of sign language as a medium of teaching and learning in the classes.

As was mentioned above in relation to the students' attitude, the teachers assumed sign language lacks the capability to mediate educational communications. In addition, all interviewed teachers responded that sign language is incompetent to be a MOI. This attitude was mentioned as one of the reasons to employ speech and sign simultaneously or Signed Amharic in classes. More than 85% of the respondent teachers agreed it is better to use sign and speech together for the communication benefits of either Deaf, hard of hearing and hearing students, though studies indicated the reverse.

The teachers pointed out some factors that created the impression they have. One of the factors mentioned by all the teachers is the vocabulary constraints of EthSL. Of these, some perceived the few signs in the newly published EthSL Dictionary (2008) as the complete vocabulary of EthSL. In addition they were not convinced by the idea of developing the language by using it more and more. The majority of the teachers conveyed that they assumed the language has more vocabulary though they were not sufficient to make the language MOI.

Except one, all the teachers also believed spoken languages such as Amharic and English are superior to sign. For this reason they constantly employed speech in teaching to complement the 'deficiencies' of the sign language.

For the question about their interest in using the language in education, all replied that they are interested. Three teachers additionally pointed out that they are interested though it is tedious to use speech and sign simultaneously in teaching. However there were some observed actions that can put the teachers' interest of using the language in question. For example, the tendency to favour speech rather than sign and the failure some teachers to encourage the students to use sign language in different classroom activities could be taken as few indicators of their lack of interest in the language.

From the answers to questions about teachers' attitude, it was possible to say they have an unaccommodating attitude towards using EthSL as a solo MOI. Since they believed it is incapable of expressing some issues in the subject matter, they preferred to use it in combination with Amharic mostly in Signed Amharic form.

#### **4.3.6.3. Parents' Attitude**

Parents' attitude towards their children's language of education was another important factor to effective utilization. In line with this, ten parents were

interviewed about their outlook towards the sign language medium education of their children.

The first question raised with regard to attitude was intended to test the information parents had about the language their children were using in classes. This question was raised because the researcher believes that if the parents had enough information on the issue under discussion, they cannot comment on it. From the answers to the question it was known that only three of the parents certainly know what languages were employed in the classes. The rest were not certain about it, but they guess it was sign language since the school is a special school for the Deaf and their children can sign after they joined the school.

Since parents' attitude regarding the MOI could influence the language use of a child, parents were also asked to share their outlook. All conveyed they are not against using sign language in their Deaf children's education. However, except one, all reflected their wish for their child to learn through spoken languages like his/her hearing counterparts. Their reasons for that were fear of discrimination in higher education, employments, as well as difficulty in communicating with the hearing community. They also believed the discrimination could not be a threat to their children if they could speak and learn with the 'powerful' languages like Amharic and English. Some of them also reflected that the language is not a fully fledged language that can serve all purposes equally as other spoken languages.

All parents further shared the same skepticism with a majority of the teachers about the capability of the language to be employed as MOI exclusively. Every informant parent reflected that EthSL could be a simple means of communication with the Deaf; nevertheless it cannot mediate the teaching-learning process in a school as a bona fide language.

From the interviewed parents eight of them can sign to some degree; in the other two parents' cases also one of the family members can sign. However, as

they stated they usually utilize speech and sign language together to support their Deaf children at home concerning education.

Though the parents did not consider that sign could be a language of education, they envisage it as useful for their Deaf children's education. Some held this position merely because they thought there were no other options to teach their children without sign language and the school just did so. They also added their observation that their children can communicate better at school and home after they joined Mekanissa School for the Deaf as another reason to accept the idea.

Generally, all parents regardless of their education level believed that sign language is incapable of mediating education. Though a majority of them have a positive attitude towards using the sign as a means of communication with their Deaf children, they did not reflect enthusiasm about accepting it as a language of education.

#### **4.3.7. Challenges and Opportunities of Employing the MOI**

The data from classroom observations, interviews with teachers, students, parents, and officials were evidence for several challenges that hinder the effective use of sign language as MOI. Based on the data gathered it is possible to group the challenges in five main categories. These are: challenges related to language proficiency, language attitude, classroom situations, material availability and policies. Apart from these challenges there were also opportunities observed in Mekanissa School for the Deaf in regards to sign language's application for educational purposes.

##### **4.2.7.1. Challenges Related to Proficiency**

Three areas of challenge identified from the data can be seen in the category of proficiency. The proficiency of sign language to be MOI, the teachers' proficiency to use it properly and students' competency to pursue education using the language were the main issues examined under this subtopic.

The inadequacy of EthSL and Signed Amharic was the most frequently mentioned challenge by the teachers, parents and officials to its use as an MOI. The teachers particularly pointed out the sign language lack of vocabulary to carry scientific and technical concepts.

The underdevelopment of the languages was the other limitation mentioned by the teachers in relation with its inadequacy. They have stated that EthSL is not a developed language like Amharic and English, thus it is very difficult to use it as the language of education even at primary level.

Apart from the mentioned inadequacies of the language, the meager competence of the teachers to teach the EthSL and use it as an MOI was observed as one challenging factor. The data confirmed that what was prevailingly reflected was more teachers' inefficiency to express concepts and ideas using the available vocabularies than the language's limitation. Many teachers practically seen when they left some utterances unsigned even though the utterances have signs in EthSL.

It was also observed that they have inadequate knowledge about EthSL and training to teach the language. Many of them also are not trained to teach via Signed Amharic or using sign and speech simultaneously. Thus including the language teachers were presenting long and complex Amharic sentences, as if they were constructed in EthSL sentence structure. From the sentences used it can be inferred that the teacher has a knowledge gap about sign language. The teacher seemed ignorant about the sentences in sign language that are generally very short and have a different word order.

The data from different sources proved that all the teachers in grades one and two were not trained purposefully to teach Deaf learners except having some skills in EthSL. The teachers were qualified in teaching ordinary students though there were even some without teachers' training college certificates. Few teachers who trained in special needs education also confirmed that they did not take enough courses about Deaf education and sign language. Thus, most

of them seem to be taken for granted their experiences which were developed habitually. Teaching the Deaf and using sign language as a medium, however, required systematic knowledge which is guided by up to date techniques. Therefore this absence of appropriate training and skill could be taken as added challenging factors to the proper use of sign language in the classes.

Lack of professional interpreters was also observed as a problem in classes where the teacher could not sign. As was observed in two sessions, the student interpreters were serving in mediating the educational communication. However using students who are grade one and two seemed neither ethical nor useful for the Deaf learners.

Most Deaf students' low proficiency was mentioned by their teachers as another factor that made the value of using the sign language in their education challenging. The teachers said the students' could not understand what they thought because they do not have appropriate competence in the natural sign language or signed language. As a result, as some of the teachers did, they might shift or tend to use spoken languages to clarify things.

#### ***4.2.7.2. Challenges Related to Classrooms Situations***

There were several problems mentioned by the teachers and the students in relation to the classroom situation. Besides, there were data from observations that pointed out challenges in the classrooms of grade one and two at Mekanissa School for the Deaf.

The unsuitable seating arrangement was among the challenges in using sign language as MOI in the classes. It was reflected by both the teachers and students it was very hard to see the sign of the teacher by backbencher students in grade one and two. It is also observed the students could not see each other. The seating arrangements in the classes did not consider the importance of facing each other in sign medium classes.

The darkness of the classrooms was the other challenges pointed out during the interviews and observations. The light in the rooms was not sufficient especially to see the signing of the teacher, his/her facial expressions and written activities in the blackboard.

In addition, it was reported by the teachers the classrooms' narrowness was a challenge to use sign language medium properly. The teachers said the Deaf learners who rely on sign mostly need individual support to understand well what has been said in sign language. However in the classes that contain 24 and 26 students were challenges to provide such support. The teachers with no assistant observed that they are unable to provide the support for all needy learners in the given 45 minutes for a session.

There was also suffocation in the classes following their thinness and lack of ventilation. This also was identified as it contributed to the lack of attention in many students. Since sign language is highly visual, losing attention can have the effect of challenging the educational communication with sign medium.

For visual learners it is useful to make everything comfortable for their vision as much as possible. Based on this, one of the teachers raised the uncomfortable effect of the white wall on vision as a challenge which should not be overlooked. Since sign is a visual-gestural language, vision plays the biggest role in getting information. The obstructions in this vision mean bringing challenges to use the language properly.

#### ***4.2.7.3. Challenges Related to Materials***

There were several materials needed in a class which employs sign language as the MOI. Among these text books and other supporting materials scarcity observed in the classes under study.

Lack of text books that are prepared or adopted considering Deaf learners' language requirements was one of the major challenges per se in the data collected. Teachers, officials at regional and national level as well as parents

pointed out that there are sober problems in this regard. As one of the teachers who have international experience explained, in the USA and Europe all textbooks are prepared for Deaf learners with sign language descriptions though they share the same curriculum contents with their hearing counterparts. The teacher said this can solve problems related to language and help to grasp the intended knowledge. However as was disclosed by all the teachers and other liable bodies there is no such text to support sign language users in Ethiopia.

Even to teach EthSL as a subject there was no textbook. The school is using, as the director and teachers explained, the first EthSL dictionary («ሀ» መጽሀፍ) that was prepared more than 30 years ago to teach sign language in the grade levels under study. In addition to the out datedness of the dictionary, using a dictionary which is not designed to be a text for primary school students is a big challenge to teach the language properly which can also have an effect on using the language as expected as an MOI.

The officials at the regional and national levels also admitted lack of materials preparation and very little has been done so far to overcome this issue. The only book published by the Ministry of Education to address the need of text book for sign language users is that first EthSL dictionary. Parents also articulated their problems in getting supporting materials in EthSL to provide for their children.

In the observed classes there were also lack of visual materials that can support the employment of sign language as a suitable medium. Except for a few pictures which were brought for some topics and the teachers' drawings on the blackboard, there were no visual materials for Deaf students. Though video materials, motion pictures, and real objects were important to empower the language and make it an effective tool as a medium, the students and the teachers confirmed such materials never appear in their classes. Based on this

the teachers mentioned this scarcity of materials as a challenge for using sign language in their classes.

#### **4.2.7.4. Challenges Related to Language Attitude**

As literatures illustrated the attitude of teachers, the students, parents and policy makers have towards the MOI can influence the utilization of the language in education.

Thus, grade one and two teachers' skeptical attitude towards sign language utilization as medium of education was a factor that can be mentioned as a challenge in its effective utilization in the classes. As was mentioned previously, almost all teachers consider EthSL as a language incapable of mediating education. Following this they try to make their own modifications while using the language in the classes. These modifications might bring challenges to most sign language users' learning, since they were not research-based for the most part. The data from observations and interviews with the teachers confirmed that most modifications in the sign language medium classes were done following the common sense of the teachers.

The students' and parents' as well as the school principals' outlook also were not supportive for employing EthSL without integrating it with the spoken languages in the educational settings. This attitude could be unhelpful for Deaf education which is mediated in sign language.

The other officials' attitude of considering the employment of sign language in education with doubt can have its own share of obstruction in the teaching learning process. As one of the officials' interview on the issue evidenced, there were misconceptions about Deaf learners' language needs. The official said, *"Deaf learners are not facing serious problem in Ethiopia. In case sign language couldn't be used in classes, they can learn by reading and writing."* However there should be a consideration that to learn how to write and read there should be educational communication at the beginning and this can be done

by sign language. Such an attitude among policy-makers could bring a significant challenge in the utilization of the language.

#### **4.2.7.5. Challenges Related to Policies**

Having policies that can guide the implementation of sign language in Deaf education was one of the areas that should get attention in Ethiopia. Unfortunately, there were no directing rules stated in any of the educational policies about EthSL explicitly. The basic educational policy documents that are serving in Ethiopia are not clear about sign language use in educational settings and how it should be employed.

The 1994 Education and Training Policy and the 2006 Special Needs Education Program Strategic Plan were documents examined for the purpose of this study. It was identified from both documents and the interview done with the Ministry of Education focal person that nothing was explicitly stated about EthSL use and its implementation in educational settings. There were only few things that can be taken as referential points for the practice.

As is indicated in the 1994 Federal Democratic Republic Government of Ethiopia Education and Training Policy number 2.2.3., one of the specific objectives of education and training is “*to enable both the [persons with disabilities]<sup>3</sup> and the gifted to learn in accordance with their potential and needs.*” To reach this end, the policy document also indicates the need for necessary qualifications among teachers at different levels. Number 3.4.5 of the policy states: “*Teachers, starting from kindergarten to higher education, will be required to have the necessary teaching qualification and competency in the media of instruction, through pre-service and in-service training.*” Since one of the necessary qualifications is being equipped with the language of education,

---

<sup>3</sup> In the original document it is indicated as ‘handicaps’. Since the term is derogatory, the researcher replaced it by the conventional term ‘persons with disabilities’.

the policy states the language necessities in education, though it didn't indicate sign language straightforwardly.

The policy also pointed out the need for mother tongue education at the primary level, signaling awareness of its pedagogical advantages. It is possible to infer from this the right of Deaf students to learn with sign language. However in the section which dealt with the language of education, sign language was not recognized as other nations and nationalities languages.

Lack of clear policy, as the regional education bureau officer describes, could brought a gap in the effective utilization of sign language in Deaf education. In addition to the lack of unambiguous policy at national level, there are no policies at regional level as well as at the school level which guides the classroom language use. As the director of Mekanissa School for the Deaf stated, there is no overt policy that shows how sign language could be used at each grades that has a logical and scientific ground.

These lacks of overt and clear guidance led the teachers in the school to follow both good and bad traditions of senior teachers with regard to language use in classes. This could also bring challenge to effective utilization of the sign as medium.

#### ***4.2.7.6. Opportunities***

Though there were several challenges to the use sign language as medium of education in Mekanissa School for the Deaf, there were also good practices that could be taken as opportunities.

One of the potential opportunities in the school to employ natural sign language as medium was its manualist philosophy. One of the persistent debates in Deaf education is between the manualists (those who advocate use of sign) and the oralists (those who rely on speech and speech reading for communication). Though the debates have not been entirely resolved yet,

manual methods are getting recognition as better ways to teach Deaf learners (Zapien, 1998). Fortunately, Mekanissa School for the Deaf is on the track of manualists and against oralists. Though there are some practical problems in employing the sign language as the MOI in the classes under study, being a manualist by itself has its own prospects for further improvements. Shifting from one manual approach, TC, to another, Bilingual, is easier than coming to manual from an oral philosophy. Thus, the school's manualist philosophy could be taken as an opportunity to employ sign language as the preferred method of educational communication in the school, especially in primary classes'.

The school's pre- and in- service EthSL training for teachers was found to be the other good practice in the school which could contribute to the improvement of using sign language as medium. The training is very helpful, especially for teachers who do not have any previous expertise in sign language. Though the three month training in the school couldn't make them a proficient signer, it could have a considerable effect to develop some skills in the language. This was also useful to make communication with the Deaf students easier in the classes as well as outside of the classes.

In addition, as the school director indicated and some of the teachers confirmed, there is a sign language study program that takes place every Friday. In the sessions the school teachers studied unfamiliar signs from the newly published EthSL Dictionary. This practice also has functional benefits for using sign as the medium of education by updating them in the language.

The other training provided by the school is parents' sign language training. The data from the interviews confirmed it is compulsory that at least one family member of the Deaf child learn sign language. The school reinforced family members to be skilled signers by providing different alternatives to participate in. This is one of the good practices, since it can create awareness among family members and develop signing skills. The training also creates an

additional domain of language use – the home domain - if family members can communicate with the Deaf students in sign language. This besides could facilitate family support in doing homework with the Deaf students, which could made the students active in the classes.

The experienced teachers that are teaching in the classes under study are the other potentials to improve sign language employments, if they supported by appropriate trainings. Continuous refreshment trainings in their language use might help to update themselves and provide the contents of the curriculum efficiently for their students with appropriate language.

Generally, the opportunities in the schools are potentials that can facilitate the better utilizations of sign language medium education. The challenges, on the other hand, are things that should be improved for better educational communication with sign language users and their educational benefits.

### **4.3. Discussion of Findings**

Based on the data analyzed the following are the findings about using sign language as a MOI in the Mekanissa School for the Deaf grade one and two.

#### **4.3.1. Deaf Communication Approach Employed in the Classes**

In history of Deaf education, several communication approaches have been to find out the best that can address the needs of Deaf learners. Even though it couldn't be possible to arrive at a consensus on single best approach, scholars are inclining to the Bilingual approach currently (Adoyo, 2002). The bilingual mode is gaining acceptance because research confirms its benefit over the approaches like SimCom and TC (Haualand & Allen, 2009). Despite that many schools for the Deaf are still stick to TC.

Mekanissa School for the Deaf is not an exception in advocating the TC approach in education. From several manual methods of communication a mode called 'TC' by the teachers and the school principal was employed in the

school. For more than 80% of the teachers in grade one and two, TC was perceived as a method that combined only sign language and spoken language. Thus, in a majority of the classes teachers were using sign and speech. Not more than 15% of the teachers are acquainted with the idea of incorporating several methods like; sign language, voice, finger spelling, lip-reading, amplification, writing, gesture, facial expressions and visuals, etc. to make educational information accessible for the Deaf learner. This means, though the teachers thought as they were employing TC, there were not enough components practically in the classes which means that standard TC was not in use. Though TC is not a preferred approach in Deaf education and out dated method as to research findings, even it was not applied properly in the school in grades one and two.

Most of the data showed the dominant communication mode in the grades under study utilized Manually Coded Amharic or Signed Amharic, which could be included in the SimCom approaches cluster. Though the teachers did not consider SimCom and TC as two distinctive styles, their practices in the classes share many of the features of SimCom. Hence, they tried to utilize sign and Amharic speech simultaneously following the structure of spoken Amharic. But in many cases they failed to keep the simultaneity of the two languages, since it is difficult to use two languages at a time equally.

As Haualand & Allen (2009) describe, signing and speaking at the same time is usually tricky and can result in a compromise that affects the quality of one or the other language. The data of this research also shows the quality of the EthSL seemed harmed in favor of Amharic in many classroom activities. As researches illustrate (Haualand & Allen, 2009; Zapien, 1998) such communication modes have impact on the quality of educational information received by some Deaf students. Few students under study similarly confirmed as they have difficulty in understanding communications in such modes, though some students' determined by the efficiency of the teachers to explain issues in sign.

Furthermore, except one teacher, all the teachers considered what they called 'TC' as the best communication mode, thinking it can give options in speech and sign language. Conversely, international studies show that TC is not a method preferred by many Deaf learners, though it is better than the oral methods (Haualand & Allen, 2009).

#### **4.3.2. The Language Used as MOI**

Pedagogically, psychologically and linguistically employing a child's mother tongue at least in his/her primary education is advisable practice. Likewise, employing sign language in Deaf education is a way to effectively teach the contents of the curriculum in a given grade level.

As several research findings show the natural sign language is capable of being MOI as spoken language does (Reagan, 2008; Kosonen, 2009, Jokinen, 2003). However, in many schools for the Deaf sign languages are infrequently used. What commonly employed are artificially constructed manual sign codes for spoken languages. Similarly practices also observed in the school under study.

The languages used in the classes as MOI were Signed Amharic (Manually Coded Amharic), written Amharic and rarely EthSL alone and Sign Exactly Amharic. Though the Ethiopian educational policies as well as international literature suggest mother tongue education at the primary level, in most of the sessions the majority of the students' first language was not employed as the MOI. Rather Signed Amharic, which is not a natural language, dominated in most of the classroom tasks. Spoken Amharic also served as medium for some classroom tasks, though it could not be a preferred way of communication for about 2/3 of the students. In grade one 16 and in grade two 18 students were Deaf or hard of hearing.

As research findings confirm, signed language is not a language that was preferred by many Deaf learners. However this language dominated as the instrument of lecturing, questioning, answering, and discussing in the classes.

On the other hand, for writing and reading classroom activities communicated through written Amharic as the main medium while spoken Amharic dominated as language of classroom administration. To administer the class EthSL, gestures, body contacts and demonstrations are employed as alternative means of communication.

#### **4.3.3. Competence of the Teachers and Students in the MOI**

As Adoyo (2002) stated, one of the key challenges in using sign languages in education is the teachers' competence to use the language as MOI. Most teachers lack competence in the sign language they use to teach in classes. This leads to a lack of interest in teaching through sign language, particularly in Africa. The case in the school under study seems similar.

The teachers' and students' under study competence in the MOI is under question. Though most of the teachers thought they were proficient, the data from observations showed only few of them were capable of explaining the subject matters using sign language medium simultaneously with Amharic. The majority also showed a lack of vocabulary and expressiveness in the sign language particularly.

All of the teachers besides believed their lack of competence is not mainly their failure rather it is the inefficiency of the EthSL to mediate education. Reagan (2008) and Adoyo (2002), in line with this stated as many teachers perceived sign language as inferior to spoken language to be used in education, as in the cases under study.

Many of the students were also in trouble to express themselves or understood what has been said in the sign medium. This problem was more serious for Deaf and hard of hearing students in the classes. The poor proficiency of the students was suspected to be related to their backgrounds. The late age at which many students acquire sign language and the unsystematic way they learn it were mentioned as root causes. Literature also supports the idea that

late language acquisition can affect negatively the acquisition pace of a child (Adoyo, 2002). The literatures also explain as children who do not acquire fluency in a first language by the age of five have a high probability to face difficulty to catch up in either sign or spoken language. The inadequacy of the language itself also was mentioned as a cause for the poor competence of the students, though such assumptions don't have ground in literatures.

Regardless of the reasons, there were only few students who could use the sign medium to question, answer and discuss on classroom activities. These few Deaf and hearing students in the classes were able to understand instructions and act accordingly. The rest and majority of the classes hardly follow instructions either in Signed Amharic or in written Amharic. To overcome such situations the teachers employed repetition, contextual explanation, demonstration and doing part of the activities as an example as strategies.

#### **4.3.4. Classroom Organization and Material Availability**

Literatures show classrooms in which Deaf students dominate and visual-gestural language is employed as the MOI require particular consideration while organizing and equipping. Naturally Deaf learners rely on visual inputs. Thus classroom of such students should be arranged to facilitate all their visual requirements and make the educational communication effective (Rosy, 2010). However the classrooms under study didn't seem arranged considering the factors that have significant influence in using sign language as medium of teaching and learning.

The rooms are very narrow and uncomfortable to follow up each student and provide individual support by getting closer to everyone. The desks were arranged without considering the need to face each other to effectively communicate in sign language. There was no enough light in the classes as well. Thus, students at the back desks were usually unable to see clearly the teachers' signing, facial expressions and written tasks on the blackboard. As

scholars like Glaser and Lorenazo (2006) suggested appropriate seating and lighting adjustments should be ensured in classrooms to use sign language as medium properly. Good lightening is also essential to be able to see the signs and facial expressions of the teacher properly.

In addition, teachers usually suggested standing in front of the Deaf students closely and also avoiding movements while teaching. Despite the fact more than half of the teachers were moving here and there, and also turning their backs to the students to write on the blackboard while lecturing and sometimes questioning and answering. This could have an effect of obstructing communication, since the students might not able to see the facial expression and other signing components properly in such position.

The seating arrangements also were unsuitable for sign medium class and it was all the same for different classroom activities. Seating arrangements that are suggested by like placing the tables and chairs in U-shape, with the teacher and/or interpreter at the one end, were not employed in the classes under study.

Visual materials are among very important facilities in classrooms which encompass Deaf learner dominantly. Unfortunately, materials like pictures, charts, videos prepared with sign language, motion pictures, were not regularly used in both classes. Only in three lessons did the teachers bring pictures to classes to aid their lectures. The teachers' reasons not to use visual materials in the classes were materials scarcity and unavailability. Few teachers also mentioned their failure to use pictures and charts in the observed session's lay on their assumption about the needless to use the aids for the specific lessons. However it should be noted visual materials are different and useful for the Deaf learners on any topic. In addition, though the teachers responded that they use visuals whenever necessary, all students reported it happened in their cases infrequently.

#### **4.3.5. Attitude towards the MOI**

The attitude learners, their teachers and the parents have about certain languages has influence in using languages for education. Though all languages are equal from a linguistic point of view, people developed attitudes mainly based on the social status of the speakers (Romaine, 1989). Similarly, the students, teachers and parents under study demonstrated unconvinced attitudes to sign language medium education.

As the interviewed students articulated, they sense that the sign language they are using is not equal to the spoken languages like Amharic and English to be used in education. They judged the language as inefficient and incapable to express abstract concepts in their school subjects. Such attitude is assumed by teachers as it comes out of the students' inefficiency in the language and the lack of families' and teachers' encouragement and support to use it.

The teachers similarly assumed EthSL lacks the capability to mediate educational communications. Thus most of the teachers tried to complement the inefficiency of the sign by speech in their classes. All teachers, on the other hand, articulated that they were interested in using sign language in their classes, but practically they did not appear like that. In many cases they give priority to speech and did not sensibly encourage students to use the languages. In sum, it is possible to say the teachers under study are not positive to use EthSL as a solo MOI, since they believe it is incapable to express some concepts in the subject matter.

As all parents conveyed they were not against using sign language in their Deaf children's education and they thought it is useful somehow, though many of them don't give adequate attention for it. On the other hand, with the exception of one parent, all did not want to hide their desire for their child to learn through spoken languages like his/her hearing counterparts as well.

Most parents further share the same inspiration with the majority of the teachers about the capability of the language to be employed as an MOI exclusively. They reflected that they could not think of EthSL as a bona fide language to serve as the language of teaching and learning exclusively other than simply as a means of communication with the Deaf. Thus, as some of them stated, they usually utilize speech and sign language together to tutor their Deaf children at home.

#### **4.3.7. Challenges and Opportunities of Employing the MOI**

There were several challenges mentioned by teachers, students and other officials and also observed in the School to employ sign language as MOI effectively in the grades under study. The challenges were related to proficiency, attitude, classroom situations, material availability and policies.

As challenges pointed out related to proficiency are inefficiency of the sign language to be MOI, the teachers' lack of proficiency to use it properly and students' incompetency to peruse education using the language.

Limited vocabularies and the underdevelopment of the EthSL presented by teachers were reasons for its inadequacy to be an MOI. Its lack of vocabulary to carry scientific and technical concepts was particularly mentioned highly. EthSL's unlikeness in development from languages like Amharic and English was also mentioned as a challenge.

Though teachers believed in the importance of using sign language in Deaf education, they also reflected their stands on the significance of combining it with speech languages to make the sign efficient. Conversely, the data from students' interviews confirmed, such language was not a preferred way of communication for some of the Deaf students in the classes under study.

On the other hand the meager proficiency of the teachers to teach sign language and use Signed Amharic as an MOI was founded to be one challenging factor. It was observed that teachers lack the skill and knowledge

to express concepts and ideas using the signed language. Many teachers practically seen when they left some utterances unsigned even though the utterances has sign in EthSL. It was also observed that they have inadequate knowledge about EthSL's structural and grammatical differences with Amharic.

The main reason for the inefficiency of the teachers was lack of appropriate training. The unavailability of such trainings for the teachers is one the challenges observed. The teachers in grade one and two are not trained purposely to teach Deaf learners except having some skills in EthSL.

The classrooms' unsuitable seating arrangements, lack of enough light, narrowness and lack of color considerations were among the challenges mentioned not to effectively use sign language as MOI in the classes. The sign and facial expressions of the teachers', other students as well as the written tasks on the blackboard were difficult to see for backbencher students.

The study also showed there were lacks of text books prepared particularly for Deaf learners. Even to teach EthSL as a subject there were no a single text book.

In the classes there were also lacks of visual materials that can support the employment of sign language as a suitable medium. Though video materials, motion pictures, and the like are important to empower the language and make it an effective tool as a medium, such materials never appear it the classes. This scarcity of materials was mentioned as challenge by many teachers for using sign language in their classes efficiently.

Attitude, besides, was an important factor to employ certain languages in education; it came out to be one challenging factor in ineffective utilization of sign language in the classes. Teachers' unconvinced attitude towards sign language as a medium of education is a factor that can be mentioned first. The students' and parents' as well as the officials' outlook similarly were not encouraging about employing EthSL without much support of the spoken

languages in the educational setting. This attitude is unhelpful for the education which was mediated in sign language.

The other challenging factor in employing sign language in education was found to be lack of clear policy. As Paulston (1999) states language policies are planned to direct equalization-program development of the previously disadvantaged language speakers/users. Typically, the language rights guaranteed by law guide the specific language use in school and the development of the general framework in the educational institutions. However, there are no such directing policies and strategies in Ethiopia that explicitly stated how EthSL should be employed in the educational settings. Lack of clear policy can bring a gap in effective utilization. This gap in the policy is highly probable to be barriers for efficient practice at different level.

One of the potential opportunities, on the other hand, in Mekanissa School for the Deaf was its manualist philosophy, which supports the employment of some form of sign as the method of educational communication. Though there are practical problems in using sign language as an MOI in the classes under study, being a manualist by itself has its own prospects for further improvements. The school training programs for teachers and parents are also other opportunities to bring improvements.

In general, though many literatures show the use of sign language in Deaf education make sense both educationally and linguistically, there are many grievances in its practice. The practice in primary classes of Mekanissa School for the Deaf also shares many of the criticisms in other countries. As in many parts of the world, signing was employed in the school in its artificially constructed manual forms which is Signed Amharic. However as scholars suggest, instruction should take place through the medium of the appropriate sign language- natural sign language (Reagan, 2008; Adoyo, 2002).

## **CHAPTER FIVE**

### **5. CONCLUSIONS AND RECOMMENDATIONS**

This research has attempted to examine sign language use as the medium of instruction in primary classes of Mekanissa School for the Deaf. To deal with this, the study employed a case study research technique and examined the data from the classes in different themes. Based on the evaluation, the research arrived at certain conclusions and provided some recommendations in this section.

#### **5.1. Conclusions**

To examine sign language use in classrooms it is useful to have a look at the communication approach employed, the purposes the MOI served, the classroom arrangements, materials available, proficiency in the MOI, and attitude of the users. Thus the research examined these topics and arrived at the following conclusions.

The dominant deaf communication approach employed in the classes is not TC, though the school intended to employ it. The features of the communication mode observed in the classes rather share a lot of things with SimCom. Especially the teachers dominantly communicated using sign which follows Amharic speech. Furthermore the teachers considered TC as the best communication approach to address diverse communication need of the students in their classes. However literatures illustrate neither TC nor SimCom are preferred way of communication by many Deaf learners.

The main MOI in the classes is Signed Amharic (Manually Coded Amharic). This language dominated as the instrument of lecturing, questioning, answering, and discussing in the classes. In addition, written Amharic was employed for writing and reading exercises as well as to give notes on the lecture. Spoken Amharic, on the other hand, served to mediate few classroom

activities like classroom administration. The natural EthSL and Sign Exactly Amharic also served as media for a few of the classroom tasks.

The Signed Language that served as an MOI dominantly is neither a preferred language nor the mother tongue of most of the Deaf students. In addition, it gave supremacy to spoken Amharic and followed its sentence structures that were not compatible with the natural EthSL. As result, misrepresentations of the Amharic utterances as well as lack of equivalent meaning and message production in the two languages were observed.

The study besides showed the teachers have no enough competence to use the EthSL simultaneously with Amharic, since they are not trained for such a system. Though most of the teachers assumed that they are efficient in using the MOI, they observed that they lack vocabulary, expressiveness and understanding the nature of the sign language to combine it with speech.

Most of the students also were hardly able to express their ideas using the Signed Amharic. Especially Deaf students almost could not understand and communicate via this artificial language. The majority of Deaf children in the classes, besides, have great difficulty in understanding the natural sign language of the teachers as well as the written Amharic. The language difficulty of the students appears to be related with the crisis in their language acquisition.

The classrooms under study do not look arranged considering factors that have significant influence in using sign as MOI. The rooms are very narrow and without appropriate lighting to address the visual needs of the students. The desks also are arranged without considering the need to face each other to see clearly the signing of the teacher and other students. Thus the communication through sign in the classes was in problem.

Apart from the classroom unsuitability, there are no text books that are prepared or adopted to Deaf learners' with sign language descriptions. Visual materials like charts, video prepared with sign language, motion pictures, and real materials didn't employ in the classes except pictures. Despite the crucial roles these teaching aids can play for visual learners, teachers could not use them because of material scarcity and lack of alertness.

The students, teachers and parents are skeptical about sign language medium education. They perceived the natural EthSL as inefficient to mediate teaching and learning as spoken languages like Amharic and English do. They considered it as an incapable language to express scientific and technical concepts of different school subjects. However there were no such scientific and technical concepts in the grade levels under study. Despite their attitude, neither the teachers nor the parents are against employing sign language in education. But they strongly advocate the need to combine it with speech- in other words using Signed Amharic.

To employ the signed language and/or the natural sign language as an MOI in the classes under study challenges identified as they are related to the above mentioned problem of proficiency, attitude, classroom situations, and material availability. In addition lack of clear policies about sign language use in education at different levels and lack of awareness among higher officials identified as challenges.

Apart from the challenges, manualist philosophy and sign language training programs for teachers and parents are prospects in Mekanissa School for the Deaf. Since manualist theory supports employments of some form of sign as method of educational communication, this could bring better opportunity for natural sign language employments in the primary classes. The sign language programs also help to bring some improvements to use the language in the classes.

## **5.2. Recommendations**

As several pieces of the literature suggest, students' mother tongue is the most preferred language of education that can bring better achievements in education (Kosonen, 2009; Grosjean, 2008, Reagan, 2008; Heugh and others, 2007; Adoyo, 2002). Since natural sign language is the mother tongue or first language of Deaf learners, it is important to use it in their education, especially at the primary level. Therefore it is imperative to give attention about natural sign language employments in schools that serve Deaf learners.

Conducting research to identify drawbacks in sign language implementation and suggesting up to date information about Deaf education and sign language use as MOI are also essential. This study was conducted with such an intention and provided the following recommendation based on the results of the study.

SimCom, the communication approach employed in Mekanissa School for the Deaf grade one and two, is not found to be the best approach in Deaf education in many parts of the world though it is better than the oral methods. Thus it is good for the Deaf students' academic achievements if the school replaces it with an up to date and better approach like Bilingual Approches (Haualand& Allen, 2009; Grosjean, 2008; Zeshan, Vasishta, & Sethna, 2005; Zapien, 1998). In Bilingualism, using the natural sign language along with the dominant spoken languages in Deaf education is a highly recommended practice. Thus EthSL shall be the major MOI in the primary classes, while Amharic is taught as a second language mainly in its written form.

To employ the bilingual approach, however, there are several things that should be fulfilled. Provide training for the teachers about the method and its implementation is one of the imperative measures. In this regard the school should work with specialized Deaf educators to acquaint their staffs with up to date methods. Furthermore, the teachers and the school should acknowledge

EthSL as a fully-fledged language that has the capability of mediating education at least at the primary level. As it identified with this study, most of the shortcomings mentioned about EthSL are not internal problem of the language. The limitations founded to be highly external that are related to proficiency and attitude of the users. To overcome these, awareness creation and refreshment trainings for teachers, parents, and other officials should be arranged. These trainings by the school and other educational offices can play key role in better use of the sign language in Deaf education.

The teachers also can improve the use of sign language in Deaf education by update themselves from readings and use the resources around them. Considering the visual needs of the sign language users they should bring different visual materials like real objects and pictures into the class to create effective educational communication.

It might be infeasible to build new classrooms that are suitable for Deaf learners within short period of time. However it is not that much difficult to make the existing classroom better suited for sign language medium teaching-learning process. It is possible to arrange the desks in U-shape without additional resource, though it could not be as comfortable as it is in wider classes. Building suitable classes that are suitable and furnished to use sign language as medium are things that should be accomplished in long run by government and the school.

On the other hand, officials at different levels should give enough emphasis for Deaf education and sign language use. Thus they are responsible to develop policies that guide the practices and provide necessary materials like text books that could address the language need of EthSL users.

With regard to making curriculum content accessible to the Deaf, the action that is taken by MOE to incorporate sign language caption for plasma transmissions could be taken as an example. Such practices are very essential at primary class levels' text book preparations. It is quite indispensable to

prepare text books for the lower grades with sign language descriptions to establish good foundation for Deaf learners' academic achievements. Additionally, it is important to perform corpus planning activities to improve the potential of the EthSL as any other Ethiopian languages. To that end policies should be explicit about sign language use as it is in some countries, since it may contribute in making some misconceptions perceptible. The explicit statements can also give directions for practice.

Train specialized teachers to educate Deaf learners is also essential activity that should be achieved in the long run by teachers training colleges and universities.

The school sign language training program for parents should also be strengthening. This can ring improvements in using the sign language in the education since it helped them to support their children meaningfully at home which have influence in school activities.

## BIBLIOGRAPHIES

- Adoyo, Peter. (2002). *Emergent Approaches towards Sign Bilingualism in Deaf Education in Kenya*.
- Alemayehu Teferie. (2004). *Sign Language and the Deaf People*. Article on Birtat Magazine, Oct. 2004, ENAD 30<sup>th</sup> year anniversary special issue. Ethiopian National Association of the Deaf (ENAD); Addis Ababa, Ethiopia.
- (2000). *The Situation of Deaf Education in Ethiopia*. Article on Birtat Magazine, Oct. 200, No. 8. Ethiopian National Association of the Deaf (ENAD); Addis Ababa, Ethiopia.
- Alemayehu Woldekirkos (ed.) (2007). *Directory of Special Needs Education Services, Equipments and Materials*. Federal Democratic Republic of Ethiopia Ministry of Education, Addis Ababa.
- Alidou, H. and others.(2006). *Optimizing Learning and Education in Africa – the Language Factor: A Stock-taking Research on Mother Tongue and Bilingual Education in Sub-Saharan Africa*. Association for the Development of Education in Africa (ADEA) UNESCO Institute for Education. 2006 Biennial Meeting. Document (Libreville, Gabon, March 27-31, 2006)
- Burns, S., Matthews, P. and Nolan-Conroy, E. (2001). Language Attitudes. In Lucas, C. (Ed.). *The Sociolinguistics of Sign Language*. Cambridge University Press; United Kingdom.
- Cantoni, Mayarí. (2007). *What Role Does the Language of Instruction Play for A Successful Education? A case study of the impact of language choice in a Namibian school*. Vaxjo University; school of humanities.
- Creswell, J. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*; 2<sup>nd</sup> ed. Sage Publications: London.

- \_\_\_\_\_ (2009). *Research Design: Quantitative, Qualitative, and Mixed Methods Approaches*. (3<sup>rd</sup> ed.). University of Nebraska-Lincoln: Sage Publications.
- Curriculum of BA in Ethiopian Sign Language and Deaf Culture. (2009). Addis Ababa university, Addis Ababa.
- Ethiopian Sign Language Dictionary*. (2008). Ethiopian National Association of the Deaf (ENAD), Addis Ababa: Ethiopia.
- Eyasu Hailu. (2008). *Sign Language News at Addis Ababa University*. Found at <http://www.ena.gov.et/EnglishNews/2008/Jul/06Jul08/62122.htm>
- Glaser, M. and Lorenazo, T. (2006). *Developing Literacy with Deaf Adults*, In Watermeyer, B and Others (Eds.). *Disability and Social Change: A South African Agenda*. Human Sciences Research Council; South Africa. Pp. 192- 205
- Grosjean, F. (2008). *The Right Of The Deaf Child To Grow Up Bilingual*. University of Neuchâtel, Switzerland. Found at [http://deafstudies.gallaudet.edu/Documents/DSDJ\\_Grosjean\\_BSL.pdf](http://deafstudies.gallaudet.edu/Documents/DSDJ_Grosjean_BSL.pdf) accessed on, 15 April 2010
- Hailu Yesuneh. (2003). *Educating Children with Hearing Disability in Ethiopia: History, Current Practices and Future Needs*. Article on Birtat Magazine, Nov. 2003, No. 7. Ethiopian National Association of the Deaf (ENAD); Addis Ababa, Ethiopia.
- Hualand, H. and Allen, C.(2009). *Deaf People and Human Rights*. The World Federation of the Deaf and The Swedish National Association of the Deaf; Helsinki, Finland.
- Herriman, M. and Burnaby, B. (eds.) (1996). *Language Policies in English-Dominant Countries*. Multilingual matters Ltd.

- Heugh, Kathleen and Others.(2007). *Study on Medium of Instruction in Primary Schools in Ethiopia*. Commissioned by the Ministry of Education.
- Johnston, T. and Schembri, A.(2007). *Australian Sign Language (Auslan): An Introduction To Sign Language Linguistics*. Cambridge University Press.
- Jokinen, M. (2003). *Education in A Multilingual World*. UNESCO Education Position Paper,The World Federation of the Deaf President presentation. Found at <http://www.unesdoc.unesco.org/ulis/index.html>; Accessed on April 15, 2010
- Kosonen, K. (2009). *First Language–Based Multilingual Education Can Help Those Excluded by Language*. SIL International & Payap University, Chiang Mai, Thailand.
- Language Policy Framework for South African Higher Education*. (2001).Council On Higher Education; Found at <http://www.che.org.za>
- Lewis, I. (2009). *Education for Disabled People in Ethiopia and Rwanda*. Paper commissioned for the EFA global monitoring report 2010, reaching the marginalized. UNESCO.
- Lucas, C. (Ed.) (2001). *The Sociolinguistics of Sign Language*. Cambridge University Press; United Kingdom.
- Hinchman, L. P. and Sandra K. H. (eds.). 2001. *Memory, Identity, Community: The Idea of Narrative in the Human Sciences*. Albany: State University of New York Press.
- Ministry of Education of Ethiopia. (1994). *The Education and Training Policy and Its Implementation*. Ethiopia.
- Ndjoze-Ojo, B. (2006). *Conditions and Factors of Effective Schools In Africa: Bilingual Education, Active Pedagogies And Pertinent Curricula: Factors Of Effective Learning*. A Presentation Prepared and Delivered for The Association of Development of Education in Africa’s, Biennial Meeting 27-31 March,2006: Gabon.

- Ogutú E. Etieno. (2006). Mother Tongue Amidst Other Languages: Playing Roles In The Classroom And Outside. In Mutasa E. D. (Ed). *African Languages In The 21<sup>st</sup> Century*. Simba Guru Publishers; South Africa.
- Paulston, C. B. (1997). *Language Policies and Language Rights*. Annual Review of Anthropology, Vol. 26 (1997); Available at <http://www.jstor.org/stable/2952515>. Accessed on September 12, 2009. pp. 73-85
- Reagan, T. (2008). *South African Sign Language and Language-in-Education Policy in South Africa*. University of the Witwatersrand and Central Connecticut State University, Connecticut, USA. Stellenbosch.
- (2001). Language Planning and Policy. In Lucas, C. (Ed.). *The Sociolinguistics of Sign Language*. Cambridge University Press; United Kingdom.
- Reynolds, C. and Fletcher-Janzen, E. (eds.) (2007). Encyclopedia of special education, 3<sup>rd</sup> ed, vol. 1. John Wiley and sons inc.; Hoboken, New Jersey.
- Romaine S. (1998). *Language in Society*. USA; Oxford University Press.
- Rosy, (2010). *Teaching Hearing Impaired Children*. Found at <http://www.brighthub.com/education/special/articles/28616.aspx>. Accessed on April 12, 2010.
- Roy-Campbell, Z. M. (1995). *Does Medium of Instruction Really Matter? The Language Question in Africa: The Tanzanian Experience*. UTAFITI (New Series) Vol. 2 No 1 & 2, 1995; University of Harare, Zimbabwe.
- Sandler, W. and Lillo-Martin, D. (2001). Natural Sign Languages. In M. Aronoff & J. Rees-Miller (eds.) *Handbook of Linguistics*. pp. 533-562

- Schiffman, H. (2005). *Language Policy: Introductory Remarks*. Available at <http://ccat.sas.upenn.edu/~haroldfs/540/polintro.html> accessed on September 20, 2005.
- Schmidt, R. (2006). *Political Theory and Language Policy*. California State University. Ricento Thomas (ed.). *Introduction to Language Policy*. Black Well Publishing Ltd.
- Seyoum Hameso. (2001). *The Language of Education in Africa: The Key Issues*. Published in *Language, Culture and Curriculum*, Vol. 10. No. 1, 1997, pp.1-13: Found at <http://sidamaconcern.com/hameso/language.pdf>
- Skutnabb-Kangas, T. (2008). Bilingual education and Sign Language as the Mother Tongue of Deaf children. In Kellett Bidoli, Cynthia, J. & Ochse, Elana (eds). *English in International Deaf Communication*. Bern: Peter Lang, Downloaded from: <http://www.tove-skutnabb-kangas.org/>
- Smits, J., Huisman, J. and Kruijff, K. (2008). *Home Language and Education in The Developing World*. Commissioned study for the Education for All Global Monitoring Report 2009. Nijmegen Center for Economics (NiCE), Institute for Management Research; Radboud University Nijmegen.
- Tesfay Woldu. (2002). *Social Opportunities and Challenges of the Deaf: A Case Study of the Adigrat School for the Deaf in the Eastern Zone of Tigray, Ethiopia*. MA thesis; Addis Ababa University School of Graduate Studies, Faculty of Education.
- Teshome Wagaw. (1999). *Conflict of Ethnic Identity and the Language of Education Policy in Contemporary Ethiopia*. Michigan State University; In *Northeast African Studies Journal* 6.3 (1999) pp. 75-88.
- Tilahun Achaw. (2002). *The Schooling Situation Of Hearing Impaired Pupils In Four Regular Schools Of Bahirdar And Debretabor Towns*. MA thesis;

Addis Ababa University School of Graduate Studies, Faculty of Education.

Valli, C. and Lucas, c. (2000). *Linguistics of American Sign Language:An Introduction*. 3<sup>rd</sup> ed. Clerc books. Gallaudet University Press. Washington, D.C.

Wolff H. (2000). *Language and Society*: In Nurse, D. and Bernd H. *African Languages, An Introduction*. Cambridge university press.

Yin, R. (2003). *Case Study Research Design and Methods*, (3rd ed.). Sage Publications, Inc.

Yule, George. (1996). *The Study Of Language*, 2<sup>nd</sup> Ed. Cambridge: Cambridge University Press.

Zeshan, U., Vasishtha, M. and Sethna, M. (2005). *Implementation Of Indian Sign Language In Educational Settings*. *Asia Pacific Disability Rehabilitation Journal*, Vol. 16 No. 1, 2005. 16-40

Zapien, C. (1998). *Options in Deaf Education—History, Methodologies, and Strategies for Surviving the System*. Found at [http://hh.tanq.org/Uploads/Franklin/Options\\_in\\_Deaf\\_Education.pdf](http://hh.tanq.org/Uploads/Franklin/Options_in_Deaf_Education.pdf)  
Retrieved on July 1, 2009

# APPENDICES

## Appendix One- Observation Checklist

### General information:

1. Date \_\_\_\_\_
2. Subject \_\_\_\_\_
3. Grade level \_\_\_\_\_
4. Number of students' : Deaf \_\_\_\_\_ Hearing \_\_\_\_\_ Total \_\_\_\_\_  
Male ----- Female \_\_\_\_\_
5. The teacher's hearing status \_\_\_\_\_

### Specific observation areas:

1. What is the medium of instruction in the classes? Language of teaching

- ✓ language of group discussions, questioning and answering
- ✓ language of classroom administration
- ✓ language of written tasks
- ✓ language of students - teacher informal communications
- ✓ language of students to students informal communications

2. Which deaf education approach (es) is employed in class? And the language model employed?

- Sign language only, Oral language (either Amharic or other language)only, Both signed language and one of the spoken languages(simultaneous communication ), Total communication (i.e. sign, oral, auditory, written and visual aids together, depending on

the particular needs and abilities of the child), Bilingual approach (sign language and another spoken language in its written form), . . .

3. Do the teachers have proficiency in the medium of instruction?

✓ can he/she explain everything properly using the medium of instruction

4. Do the students have proficiency in the medium of instruction?

✓ Which language do they prefer to use for class room activities?

✓ Do they understand what the teacher instructs using sign language?

✓ Do they act according to the instructions in sign language? Or do they need additional clarifications in other ways?

5. Are there teaching aids or/and materials that can help in sign language medium education?

✓ What are the teaching materials and the aids used?

✓ Do prescribed teaching materials like textbook adopted to fit with the students special need

✓ How they are used for the lessons?

6. How are the classrooms organized? What does the environment look like?

✓ How do the students be seated?

✓ Where does the teacher stand while teaching (interpreter)?

✓ Is there sufficient light?

✓ Is there unnecessary background noise?

✓ Where is the teaching aid and other learning materials?(if any)

- ✓ How do the students have their seats for different class room activities?
  - ✓ Does each student has text books?
7. Do the students show interest in using the medium of instruction?
- ✓ Do they participate actively and use sign language?
  - ✓ Are they inclined to use sign language? Or do they tend to other languages?
8. Do the teachers show interest in using the medium of instruction?
- ✓ Are they inclined to use sign language? Or are they inclined to use other languages?
  - ✓ Do the teachers encourage the students to use sign language?
9. How do the teachers express new concepts in sign language?
- ✓ Is there any attempt at coinage?
  - ✓ Is shift to another language?
  - ✓ Any other mechanism like demonstrations, finger spelling?
10. What does the general situation of sign language usage in the teaching-learning process look like? General comment



9. How do you communicate (your interpreter communicate) new words and concepts that don't have sign in your subjects?
10. Do your students understand the contents of the subject matters when it is explained in sign language?
11. Do the students act accordingly with the instruction expressed in sign language?
12. Are your students proficient in sign language? Can they explain anything in class using sign language?
13. Are there teaching aids available on sign language in your school (e.g. pictures, videos, other visuals, supplementary materials)? Do you use these materials in class?
14. To which language do you incline while teaching in class? Why?
15. Are you interested to use sign language as medium of learning and teaching in your school? Why?
16. Do parents support using sign language for their children's education?
17. Do you encourage your students to use sign language for all activities in classrooms?
18. Are the classrooms suitable for sign language medium instruction (the seats, the lighting, sound system)? Why?
19. Briefly explain challenges you face in using sign language as medium of instruction? What are the possible solutions for these problems?
20. What are the very good things about using sign language as medium in your school?
21. General comments?





**Appendix five – Guiding Interview Questions for Ministry Of Education  
and Addis Ababa Region Education Bureau**

1. How much emphasis is given for sign language use in Deaf education at ministry/regional level?
2. What is the stand of the ministry/office in using sign language in Deaf education, since the educational language policy of our country is almost silent about this?
3. Do you have any other policy, strategy, manual or any other documents that guides sign language utilization in Deaf education? What about the practice?
4. How does the ministry/office interact with and schools, as well as other responsible bodies of Deaf education to improve sign language medium education?
5. What is the dominant Deaf education approach your office advocates to guide the practices (i.e. total communication, simultaneous communication, bilingual approach, oralism, manualism, or what)?
6. Have you ever conduct a research to understand the situation in language use in deaf education or do you have any follow up mechanism? If so, what do you learn from that and how did you react or plan to react (i.e. at policy making or any other level)? If not, why don't you follow the situation?
7. What are the standardization activities done so far in relation with sign language medium education at ministry/regional level? (i.e. teaching materials and dictionaries preparation, language development works, and the like)
8. What are the activities done so far and do you plan to improve sign language use in education effectively?(like; facilitating schools for sign language use, adopting of text books, training teachers in the areas, etc)
9. How do you describe the present situation of SL employment as medium of instruction in Ethiopia (having in mined mother tongue education is promoted at primary school level and sign language is a mother tongue for the Deaf)?
10. What are challenges and prospects of using sign language in the educational activities?
11. General comment?

## **Declaration**

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

**Name** \_\_\_\_\_ Elizabeth Demissie \_\_\_\_\_

**Signature** \_\_\_\_\_

**Date of Submission** \_\_\_\_\_