



**Addis Ababa University School of Graduate Studies
Department of Special Needs Education**

**The Assessment of Ethiopian Sign Language
Educational Interpreters among Teachers In five
Regional States of Ethiopia**

2012

Prepared: - by Ruth Girmay

Advisor: - Belay Hagos (PHD)

Abstract

Sign language is a formal language, socially agreed on, rule –governed symbol system that is generative in nature. The components of sign language are not phonemic (sound) combinations that movement at form words, at spoken language, but rather phonological combinations (i.e. hand shapes, form signs (Mccanally, 1994).

The main purpose of this study is to assess the Ethiopian sign language using for the teaching purposes in five regional states of Ethiopia. In order to meet this purpose 31, respondents selected based on judgment sampling. The required data were collected through interviews, videotape, and classroom observation and text analysis.

The result of the study was analyzed qualitatively. The result of the study shows that the hearing-impaired students and their teachers seem to fail to establish common understanding because of lack of sign language for technical and scientific environmental science and chemistry terminologies.

Lack of adequate skills on sign language on the part of the teachers as well as deaf students and sign language interpreter's complexity and uniformity of sign language used by most of the hearing-impaired students in five regional states of Ethiopia.

As indicated by this research, there is wide variation from region to region in the use of Ethiopian sign language in environmental science and grade 11 chemistry subjects. Failure communication exists among students and, more over, between students and teachers. The Sign language variations are also seen among teachers, interpreters, and students.

Finally : the study recommends continuous training of sign language for teachers and interpreters, Laboratory and resources should be available at high school and university levels, encourage creating new sign and experience sharing , prepare sign language dictionary in different subjects and further researcher must be done.,

Table of content

Title	Page No
Signed approval Sheet by the Board of Examiners	
Acknowledgments	
Table of content	
List of acronyms	
Abstract	
CHAPTER ONE	
1. Introduction	
1.1 Background of the study.....	
1.2 Statement of the problems	
1.3 Objective of the study	
1.4 Significance of the study.....	
1.5 Operational Definitions	
CHAPTER TWO.	
2. Review of Related Literatures.....	
2.1 Sign Language.....	
2.2 The History deaf school in Ethiopia.....	
2.3 Interpreting in educational setting.....	
2.4 Interpreter tutor.....	
2.13. Language Variation.....	
2.3. Myths and Misconceptions.....	
2.2.1 All Deaf people knows sign Language.....	
2.2.2 All deaf People can read lips.....	
2.2.3 Deaf children can not attend school	

- 2.2.4. Deaf people are not as intelligent as hearing.....
- 2.2.5. Hearing aids enable people to hear.....

CHAPTER THREE

- 3. Methodology.....
- 3.1 Research Design and method
- 3.2 Sample schools and participants
- 3.3 Data Collection instruments.....
 - 3.3.1 An interview guide.....
 - 3.3.2 Focuses group discussion..
 - 3.3.3 Analysis of Ethiopian Sign Language dictionary and books.....
 - 3.3.4. Classroom observation.....
 - 3.3.5 Data collection procedure.....
 - 3.3.6. Pilot Study.....
 - 3.3.7 Data collection for the main study.....
 - 3.3.8 Data Analysis.....
 - 3.3.9 Ethical consideration.....

CHAPTER FOUR

- 4.1 Results
- Addis Ababa,
 - Teachers and hearing impaired students.....
- Oromiya Region,
 - Teachers and hearing impaired students.....
- Tigray Region,
 - Teachers and hearing impaired students,
- Amhara Region,
 - Teachers and students with hearing impairment.....

Southern Region,
Teachers and students with hearing impairment.....

Pre-Lingual Students in 5 Regions.....
Post-Lingual students in 5 Regions.....
First Teachers in 5 Regions.....
Second Teacher in five Region.....

**Grade 4th Interpreters in mekanisa school for the deaf and
Yekatit 23 special school.....**
**Grade 11th interpreters Minilik second preparatory inclusive
Education interpreters and hearing impaired students.....**
Chemistry grade 11th interpreters in 5 regions.....

Information obtained from interview and group discussion.....

**An interview held with employed interpreter
in the school.....**
**An interview held with student interpreter
In the school.....**
An interview held with plasma interpreters.....
An interview held with plasma interpreters Students with HI.....
Information held from class room observation.....
Information held from Eth Sign Language dictionary and books.....

CHAPTER FIVE

5.1 Discussion.....

CHAPTER SIX

6.1 Conclusion.....
Recommendation..... Reference
Appendix

CHAPTER ONE

1. Introduction

1.1 Background of the Study

Language is complex system of communication with a vocabulary of conventional symbols and grammatical rules that are shared by members of a community and passed on from one generation to the next, that changes across time, and that is used to exchange an open-ended range of ideas, emotions and intentions (Johnston and Scihembr, 2007).

Sign language, which is made up of an organized system of signs including gestures, mimes and facial movements, is usually used by the deaf people, or the hearing who can communicate with deaf people. Just like spoken language, there are many different sign languages in the world. Like any other languages, sign language can be elaborated, codified and standardized (ENAD, 2003).

The Ethiopian sign Language has its origin in American Sign Language (ASL) with some influences from Nordic countries and indigenous local signs. In 1951 E.C. a special school for students with hearing impairment was established in Addis Ababa around Kechene area by followers of Mekane Yesus church. It was later transferred to Bako. In 1956 E.C. the Mekanissa School for the deaf was established by Mekane Yesus church believers and in 1959 E.C. the Alpha special school for the deaf was established around Bole area by the American missionaries. There was another school in the northern province of Eritrea at Karen. With the coming of graduates from the Keren School for the deaf to Addis Ababa in search of employment, the deaf from the different schools started exchanging signs. Ethiopian is a home to many nationalities each with their own unique culture. This means that the deaf people have their own culture (Birtat, 2003:49).

In the first National Amharic sign Language dictionary, 80% of the signs are derived from the Talk to the Deaf, which is a book by the author of Joy of signing. Because of this, most of Ethiopian deaf schools and deaf students use the Joy of signing when they teach and

learn English signing language. The joy of signing is one of the most comprehensive guides available for mastering the current basic sign used to communicate with deaf people in either the word order of English language or in the American Sign Language pattern. It provides the basic vocabulary needed for persons entering interpreter-training programs. Families as well as professionals communicating with deaf children and adults will appreciate this manual's conceptually based vocabulary. This 352 pages long guide contains about 1525 signs and 26 manual alphabets (Riekehof, 1987).

Missionaries, with the use of American Sign Language, administered the beginning of sign Language establishing schools for the deaf. Currently there are many special classes, boarding schools, special school, and inclusive schools. From each regional state of Amhara 22, Tigray 4, Oromiya 40, Somalia 1, Benshangul Gumuz 2, Gambella 1, South Ethiopia 19, Addis Ababa 9, Harari 1, and Dire Dawa 2. The total schools are 100 schools (MoE, April 2007 p 1-4).

As far as the current researcher's observation is concerned, the process of teaching people with hearing impairment using sign language in Ethiopia is difficult and this is because of two principal reasons. The first is lack of proper sign language for technical and scientific terminologies. The second one is in relation to the immaturity of level of the language and the shortage of sign language vocabulary, which forces teachers or interpreters to create their own sign (symbol) to conduct the teaching Process for hearing impaired students that may differ from school to school.

Because of this, students with hearing impairment coming from various regions find learning process difficult and at times engage in disputes, arguments and disagreement with interpreters and teachers. This is, as I was able to observe since these students with hearing impairment from different regions had been developing the culture of learning in various sign languages, creates problem when they go to other areas for education. When the researcher looks at the Ethiopian sign language books and dictionary, it is doubtful to assume that they consider the identity and culture of our country. This, in itself, justifies that students with hearing impairment face many problems from being influenced negatively to even being unable to realize and understand their country's culture including the types of food, clothes, annual holidays, etc of various nations, nationalities and peoples

of the country. This also creates another impact upon the students making them unable to exchange their respective experiences properly. This is true especially when I look at the dictionary of Amharic sign language for people with speaking and hearing difficulties. I assume that it is significantly influenced by an American culture and consequently I asked myself that if there is any concept of sign language in Ethiopia and decided to conduct a study in this area.

1.2 Statement of the Problem

Obviously, deaf children are often passive participants in communication, unless they have exposure to sign language early in their life. Whenever the environment is not favorable for using sign language for deaf children, their language skills will be diminished, and this in turn deprives them of interpersonal and intrapersonal communication. One manifestation of such problem could be slow development of vocabulary and syntax of children who are deaf (Moore, 1996).

The researcher observed that students with hearing impairment are not able to reach to the level of higher education and that there is no professional Educational interpreter in Ethiopia. Following that, an interpreter came from Hosaena School for the deaf to interpret for hearing impaired students in Selihom Special Needs Education Institute and when he was trying to do so, there was serious opposition and disagreement against him from the students with hearing impairment. The reason for this disagreement was, according to the students, the relative difference between the sign language in Hosaena and that of Addis Ababa. The researcher was also able to listen to such complaint regarding the variation of sign language in different regions.

Similarly, there are different variants for different sign languages and this is often argued between or among interpreters of sign language. Another area of problem is that whenever the interpreter is absent the students who know sign language (student interpreters) try to interpret for their peers (hearing-impaired students). The complaint that the researcher was able to listen from hearing impaired students is that they face difficulties to understand the concept of the lessons in such occasions.

It is observed that there exists variation of Ethiopian sign language performance between the employed and student interpreters and that this becomes an obstacle for the teaching – learning process.

Considering this problem, the researcher has decided to conduct the research. Therefore, the purpose of this study is to assess the practice and challenges of the Ethiopian sign language educational interpreters, teachers, and students.

1.3 Objective of the Study

1.3.1 General Objectives

The general objective of the study is to assess the Ethiopian sign language used for the teaching purposes in five regional states of Ethiopia.

1.3.2 Specific objectives

The specific objectives of this research are:

- 1) To assess the practice of teaching and learning of students with hearing difficulties
- 2) To find out the major challenges faced during teaching and learning process using Ethiopian sign language,
- 3) To identify the good practice of interpreters of Ethiopian sign language,
- 4) To examine the communication and differences among plasma Educational interpreters and school interpreters in five regional states of Ethiopia, and
- 6) To assess the communication differences among employed and student interpreters in the schools.

1.4 Significance of the Study

In Ethiopian context, an assessment of Ethiopian Sign Language educational interpreters and teachers has been hardly undertaken. This study, therefore, would have its own part to play in assessing and mirroring out the realities of EthSL in instructional application in the

deaf schools. In so doing, it may also give an insight for implementation of teaching deaf students through Ethiopian sign language.

Finally, by managing out the realities and suggesting feasible strategies for better implementation, the researcher believes that the study might serve as a springboard for other researchers who wish to undertake deeper study in the area.

1.5 Operational Definitions

Hearing Impairment: An Overall term that includes all levels of hearing loss both deaf and deaf hard of hearing

Pre-lingual Deaf: Having lost the ability to hear before developing language

Post-lingual Deaf: Having lost the ability to hear after developing language

Communication: is the way of exchanging information through sign language between grade 4th and 11th teachers, students and interpreters

Language Variation: Variation in language means the different users of language have different ways of saying the same thing and it is normal part of all language communities (Schembir 2005)

Educational Interpreter: A person who uses sign languages and/or finger spelling to translate spoken communication in the school so deaf individuals can understand it.

Teachers: Both deaf and hearing teachers who teach the pre- lingual and post- lingual deaf students

CHAPTER TWO

2. Review of Related Literature

2.1 Sign Language

Sign language is a manual language used by people who are deaf to communicate a true language with its own grammar. Although children face extraordinary challenges in learning a spoken language, they can easily learn sign language with exposure. Historically, however, sign language has suffered from several misconceptions, including the belief that it is not a true language. The notion that sign language is simply a primitive, visual representation of oral language similar to mime was first challenged by the pioneering work of William Stokoe at Gallaudet University. According to Stokoe, each sign in ASL, analogous to the phonemes of spoken English, consists of three parts: hand shape, location, and movement (Stokoe, 1960; Stokoe, Casterline, & Crone Berg, 1976). For many years, Stokoe's colleagues scoffed at him, but research in several areas has proved that he was correct in asserting that Sign Language are visual languages that develop and change. Sign languages are not usually uniform, but have dialects that differ from school to school, town to town and region to region.

Sign languages in rural areas are often local languages /dialects. One dialect is not better than another as long as deaf people use it. Deaf people from different regions should respect and value the sign used in other dialects of their language. Foreign sign languages should never replace the national /local sign language and dialects (Birtat magazine, 2001, ENAD).

Sign language is a formal language with socially agreed on and rule –governed symbol system that is generative in nature. The components of sign language are not phonemic (sound) combinations and movement that form words at spoken language, but rather phonological combinations (i.e. hand shapes, movements, orientation of the palm and location) that form signs (McAcanlly, 1994).

2.2 History of Deaf School in Ethiopia

The education of the deaf and hard-of hearing children in Ethiopia was out of scope of the society. If there was any program to speak about, it could be traced to the missionary work of the church of Christ. According to Mary and Curl (1999), the first school for the deaf was established in Addis Ababa 1961 (Butler et.al, 1975) with twenty deaf children in a rented building near piazza under the leadership of Carl Thompson and Lary Darton, hearing professionals from the U.S.A. (Hailu Yesunehe 2003)

The arrival of the young couples, Mary and Curl in 1964, assured the school a permanent site in Mekanisa area on a land donated by Princess Tenagneworq Haile selassie, and the school was named after her youngest son prince Amaha Desta. It is now renamed Mekanissa School for the deaf (Hailu, 2003)

The school used simultaneous communication (SimCom) through the English language as a means of instruction until 1969. In 1969 bilingualism was introduced by HailuYesu through Amharic SimCom, and the curriculum was expanded to include all subject areas taught to hearing children up to the 7th Grade, culminating in the development of the first sign language text in Amharic in 1978. (Hailu, 2003)

Other missionaries came in the footsteps of the Church of Christ, and opened three schools that are more special one in the former town of Keren, and others in Addis Ababa, and the town of Hosanna in Southern Shoa. The Church of Christ opened one more school for the deaf in the town of Matoria in Sidamo region. (Hailu, 2003)

The Fine Art School of Addis Ababa and the Ede-Tibeb School were non –traditional places where a handful of privileged deaf children attended to pursue trades and crafts. Non-traditional schools in this sense refer to those schools that aimed at giving training hearing children. They were not equipped to teach deaf children. The schools did not have support services for the deaf children, let alone provisions for language development. As result, those who graduated from these schools were not required to take other subject matters resulting in semi-literacy (Hailu, 2003).

In the 1970's, intensive advocacy began for the inclusion of the deaf children in the national rehabilitation and education policy by parents, firebrand teachers of the deaf, and advocates of the deaf. In response to this social movement, the Ministry of Education took over the Ezne Tsimuman School for the Deaf, which was dysfunctional by then. It was renamed Alpha school for the Deaf, and expanded the classes up to 8th grade, thus, shifting the burden of educating children with hearing disability from parents to society for the first time in the history of the nation (Hailu, 2003).

Currently there are many special classes, boarding schools, special schools and inclusive schools in Ethiopia. The total schools are 100 schools with 22 schools in Amhara, 4 in Tigray, 40 in Oromiya, 1 in Somaliya, 2 in Benshangul Gumuz, 1 in Gambella, 19 in South Ethiopia, 9 in Addis Ababa, 1 in Harari, and 2 in Dire Dawa (MoE. April 2007).

The information above does not include the developments after the year 2007.

2.3 Interpreting in Educational Settings

Residential schools for the Deaf have vastly reduced populations. Deaf and hearing students are taking classes from hearing and deaf teachers. This has caused an explosive need for educational interpreters. Because of this need, many interpreters have full-time interpreting jobs. Interpreters are present in many educational settings: elementary and high schools, junior colleges, adult education programs, four-year colleges and universities, master's and doctoral programs, vocational and technical programs, and less formal educational programs.

Generally, the interpreter sits facing the D/deaf student at the front, to the side and slightly in front of the teacher. If possible, the D/deaf student should be able to look past the interpreter to see the teacher without straining. This also applies to the use of visual aids. The interpreter should be positioned in such a manner that he/she will not block visibility of visual aids and that students can see both easily; sometimes this necessitates standing and moving around.

Since movement is so dominant in signing, interpreters should work to use space and directionality clearly and consistently. Whenever possible, it is important to preview each

visual aid and determine the range and orientation. Range indicates things like size of objects, amount of details and focus of the material. Orientation refers to how things are situated on the up-and-down axis and so forth. If the visual aid is a movie or slides, low light should be allowed to shine on the interpreter; otherwise, a small flashlight can be held by the D/deaf student and used to light the interpreter's hand and face. Interpreters should carry such a flash with them.

Typically, the educational interpreter specifically uses the educators required in that setting. Depending on the students or classrooms different schools might use, SEE, SL, or several systems. Since educators have additional responsibility regarding language development, they also tend to determine which system or systems are used. The interpreter will use whatever is required in a school. In colleges, universities, junior colleges, and technical vocational programs, interpreters generally use language or system of communication preferred by the students. Again, the institution's policy might dictate which way the interpreters lean. Often technical terminology comes into play, and for this reason, technical signs are used. Sometimes there is no known technical sign. In these cases, the clients and the interpreter may agree upon an invented sign to use for that term or may fingerspell it. Interpreters must remember that these may well be temporary signs, not useful or understandable with another client unless negotiated. Sign Language interpreters are essential to access public education and are a vehicle to interpret for hearing and D/deaf individuals (Slow S.N., 2000).

2.4 Interpreter-tutor

The interpreter-tutor is usually located just outside the direct line of sight from the student to the teacher, slightly facing the student, thereby allowing the student to read directly the speech of the teacher or interpreter. The interpreter repeats what the teacher is saying through signs, finger spelling, and no vocalized speech. He or she may paraphrase or modify what the teacher is saying if the student is not familiar with the words or concepts being said. Interpreter-tutors are not teachers but must be experts in total communication. They must pass a proficiency examination and may have to be certified in some states. Using an interpreter is a new experience for many teachers. Initially it seems very unusual

to both the teacher and the hearing students. In fact, for the first several days or until the hearing students becomes comfortable, the signs, gestures, and expressions of interpreter may seriously distract them (Gearhart et al., 1996.)

2.5 Language Variation

Variation in language means the different users of language have different ways of saying the same thing and it is normal part of all language communities (Schembir, 2005).

Both spoken and sign languages exhibit variation. That is, users of spoken and sign languages have alternative ways of saying the same thing (Lucas et.al, 200).

2.6 Myths and Misconceptions

2.6.1 All Deaf People know Sign Languages

The misconception that all Deaf People know sign languages has received considerable attention throughout the past several years. The public have become more aware of interpreters and have observed them as they facilitate communication. Sign language classes are being offered on a regular basis in community centers and colleges as more people started to express interest for learning the language. Because of this exposure, hearing individuals may assume that all deaf people can sign. Today, 95 percent of students with severe to profound impairments attend classes that incorporate some type of manual communication into their program

However, not all of those who are deaf sign. Hearing individuals periodically encounter a deaf person who does not know how to sign or who prefers to communicate orally (Mindel & Vernon, 1987, P.149).

2.6.2 All Deaf People Can Read Lips

The term “lip-reading” has been used to denote the process deaf individuals engage in while attempting to comprehend what the speaker is saying. However, upon closer examination, the term was changed to “speech reading”, thus, signifying the comprehensive scope of the process. Speech reading, unlike lip-reading, not only includes lip movements, but also incorporates facial expressions, eye movements, and body gestures (Bevan, 1988).

All of these factors assist hearing-impaired individuals in their attempt to comprehend what is being said. Speech reading, therefore, becomes a supplement to the communication process, assisting individuals in their repetitive skills. It is not a substitute for one's hearing, but rather a technique that can be incorporated to enhance communication and promote understanding of the spoken message. Members of the professional community have debated whether speech reading is an innate ability individuals possess or rather a skill that can be developed. Although there is no consensus on this point, certain issues within the domain of speech reading are generally agreed upon. Almost all professionals support the premise that speech reading has certain limitations.

1. From 40 to 50 percent of speech, sounds encountered in the English language are not visible on the lips. Sounds such as i, e, g, h, a, and k remain hidden when they are vocalized, thus preventing the speech-reader from receiving words entirely.
2. Some of the sounds are homophonous (look alike on the lips) such as p, b, and m and add confusion as one tries to determine if the word is "mat, bat, or pat".
3. To benefit from speech reading, individuals must have an extensive language background. Without this, they will be unable to fill in the gaps providing them with information that cannot be obtained through speech reading or hearing (Benvan,1988,p.106)
4. Hearing individuals outside of the field of deafness frequently assume that all deaf people can speech read and fully comprehend what they are saying. This is a misconception, and deaf individuals face frustrations everyday as they attempt to understand what the speaker is saying. Although some hearing impaired individuals are excellent speech-readers, the majority is not; they find themselves struggling in their efforts to understand what is being said. When trying to surmount a breakdown in communication with a hearing-impaired person, hearing people frequently resort to other methods in their attempt to make sure whether their message is understood. Often times, the first question that arises pertains to whether or not the hearing-impaired individual has the ability to read (Benvan, 1988, p.106).

2.6.3 Deaf Children Cannot Attend School

Prior to the seventies, it was not uncommon to hear deaf individuals or parents tell stories of how they or their children were denied access to the public school system. The majority of deaf students attended residential schools for the deaf, often traveling long distances and remaining there throughout most of the academic year. If the parents declined the services of the school for the deaf and chose to keep their child at home, it was often left to the discretion of the school board to determine if the child would be admitted to a regular public school. If the child had a secondary handicap or exhibited any characteristics denoting behavioral problems, he/she was often sent home, unless other educational facilities could be located.

However, in the mid-seventies this condition started to change. On November 29, 1975, President Gerald Ford signed into law the „Education for all Handicapped Children Act of 1975“ (public law 94-142). It was significant legislation for the handicapped because it charged the local and federal governments with the responsibility of guaranteeing that each handicapped American child would receive a free, appropriate, public education (Annon, 1981). This law has not only opened doors for many deaf children but it has an impact on where they attend school.

In the early seventies, 48 percent of all school-aged deaf students attended classes away from home in residential schools, whereas in 1984, 74 percent attended day classes while living at home (Mindel and Vernon, 1987, p.149). In addition, in 1984, 15 percent of deaf student population attended regular classes with normally hearing students on a full-time basis (Mindel &Vernon, 1987, p.150). Prior to the passing of P.L.94-142, this practice was so rare that statistics are not available.

Today, deaf children have the option of attending public school or residential school facilities. Several postsecondary institutions, technical schools, and vocational training centers have designed specific programs with support services for this population.

2.6.4 Deaf people are not as intelligent as Hearing People

One's intelligence is often confused with one's ability to communicate. Upon encountering individuals who have weak expressive skills, there is a tendency to assume that the person has inferior intellectual functioning abilities. Hearing people place a high premium on communication skills, and the way individuals present themselves is often used as a baseline to determine how intelligent they are. The hearing population use word choice, sentence structure, grammar, and presentation as measures to ascertain who is intelligent and who is not.. Unfortunately, many individuals are stereotyped based on these criteria.

When deaf people express themselves vocally, and the sounds they produce do not make sense to the hearing observer, it is misconceived that it is because they are "dumb" or "stupid", without realizing the difficulties they encounter with speech reading. Research indicates that the level of intellectual functioning of deaf population is comparable to that of hearing people. Studies conducted by Braden concluded that the average IQ score on the performance part of the WISC-R was 96.89, only slightly lower than the hearing children's norm of 100(Braden, 1985, p.499).

Because speech and language are often confused with, thinking, deaf individuals are perceived as being intellectually inferior. However, one's ability to speak and the content of what one has to say are two entirely separate processes.

2.6.5 Hearing Aids Enable Deaf People to Hear Speech

One of the common misconceptions surrounding deafness lies in the area of amplification. Hearing aids are frequently purchased with the preconceived idea that they will restore normal hearing to the hearing-impaired person. Older adult, particularly, may become frustrated when they purchase an aid. They may find that the quality of sound they receive falls far short of their expectations. Although their level of hearing may be enhanced, they may find that what they are able to understand varies considerably.

Hearing aids serve the purpose of amplifying sounds. Speech sounds become loud enough when they are within the range of individual's hearing. However, an aid cannot replace damaged nerve fibers and it cannot clarify speech. The type of loss experienced will determine how beneficial the aid will be. If the loss is mild, the increased volume provided by the aid may permit excellent clarity. However, if the individual has severe damage to the

nerve fiber located in the inner ear, amplification will not provide the same effect. Upon using an aid, these individuals will experience the ability to hear speech and environmental sounds, but they will not be able to clearly differentiate the speech sounds.

Those who have a sensational loss are unable to hear frequencies in the higher pitch range, where the greatest amount of speech sounds are located. Even with a hearing aid, amplified speech may still be distorted. When too many nerve fibers located in the inner ear are damaged, speech will never be completely clear. As a result, the individual may be able to hear the sound, but he will not be able to understand what is being said.

Those with profound losses frequently benefit from an aid, as they are able to locate the source of environmental sounds. However, they do not provide the individual with clear speech sounds (Bevan, 1988, p.58).

CHAPTER THREE

3. Research Design and Methodology

3.1 Research Design

The general objective of the study is to assess the Ethiopian sign language used for the teaching purposes in five regional states of Ethiopia.

The study is a qualitative research, which employees a descriptive survey as a particular approach. Among the different methods available in qualitative approach, Discourse analysis has been selected for this research because of its appropriateness for the study and its help to investigate and analyze the research problem. The researcher has purposively selected five regional states of Ethiopia. The researcher believes that these regions can represent most of the languages spoken in Ethiopia and are easily accessible.

3.2 Sample Schools and Participants

Table 1: Educational Interpreters, Teachers, and Students

Region	Schools	Grades	Pre-Lingual	Post-Lingual	Employed Interpreters	Student Interpreters	Teachers
Addis Ababa	3	4,11	2	2	4	2	2
Amhara	1	4	1	1	1	-	2
Oromiya	1	4	1	1	1	-	2
SNNPR	1	4	1	1	1	-	2
Tigray	1	4	1	1	1	-	2
TOTAL	7	4,11	6	6	8	2	10

As the table above indicates, 4 employed educational interpreters from Addis Ababa, 1 educational interpreter from each of the four regions, 2 student interpreters from Addis Ababa, 2 teachers from each of the four regions, 2 pre-lingual students from Addis Ababa and 1 pre-lingual deaf student from each of the four regions, 2 post-lingual students from Addis Ababa and 1 post-lingual deaf student from each regions were selected for the study. In other words, 2 student interpreters, 6 employed interpreters, 12 hearing-impaired students and 10 teachers from five regional states of Ethiopia have been considered. There are 109

inclusive and special schools for the deaf in Ethiopia. The researcher has selected sample schools from only five regional states of Ethiopia.

The study is delimited to deaf students, teachers, and interpreters in grade 4th and 11th grades. These are:

1. Mekanisa School for the deaf: It was formerly a non-government deaf school and it offers an inclusive education from preschool to grade eight.
2. Yekatit 23 Special Needs School: is a governmental school located in Addis Ababa and has a special class for grades up to seventh.
3. Menelik II Secondary School: it is a government school located at Arat Kilo in Addis Ababa and offers inclusive preparatory program.
4. Debre Berhn Atse Zera Yaacob: is a government school located in Amhara region offering up to grade 4 and has a special class/unit.
5. Adama No. 2: Is a government school located in Oromiya region and it teaches up to grade 4. It has also a special class /unit.
6. Mekane Yesus School for the Deaf: is a non-governmental school for the deaf located in Hosanna, SNNP. It offers education up to grade 10. In addition, it has vocational education program
7. Mekelle: is a government school located in Mekelle, Tigray offering up to grade 4 and has a special class/unit.

The seven schools are selected because the researcher believed they could provide adequate and reliable information. Addis Ababa, Amhara, Oromiya, SNNP regions have 102 inclusive and special unit schools for the deaf. About 94% of deaf schools are found in the five regions.

CHAPTER FOUR

4 Results

4. 1 Communication gaps among grade four teachers, interpreters and students with hearing impairment in using sign language

By using sign language for understanding the overall situation of teachers and students in relation to teaching-learning process, and to examine the whole process, the researcher was able to ensure that students were able to explain about 50 Environmental Science words of the first semester

CHAPTER FIVE

5. Discussion

This research is conducted to assess the Ethiopian sign language use for the teaching purposes in five regional states of Ethiopia. Generally, the researcher has observed that serious problems are encountered in making use of 50 words of the sign language in the fourth grade specifically in environmental science subject matter. The study shows that students find it extremely difficult to communicate using the sign language. Similarly, the researcher has assessed how the use of the sign language incorporating the 40 specialized words is effective holding interviews with the interpreter of the plasma lesson given for the 11th grade Chemistry class with particular emphasis on interpreter of Minilik School as well as students.

This research can show what the teaching learning process using the sign language looks like particularly for the deaf. It was found out that there is wide discrepancy in the use of sign language in environmental science education of the 4th grade and Chemistry classes of the 11th grade. Failure in communication exists among students as well as between students and teachers. The discrepancy is also seen among teachers and interpreters. Similarly, the use of the language is rather severely limited.

The participants are unaware of the signs of the words given and the use of the sign language in respect of these words varies noticeably. It can be assumed that there is shortage in words that can be used for education purposes.

It was found out that there is shortage of interpreters in our country especially in the education field. It can be said that the research is a good indicative of the fact that students find it rather difficult to use the language to express their thoughts. The major cause of shortage of words for education in sign language is caused by failure of the concerned bodies to make efforts to further develop the language. The problems interpreters face with the use of words in education are caused by the fact that they have not been provided with enough trainings. Sign language in the various schools was adopted without maintaining

uniformity. Various organizations and individuals without proper coordination have published these.

As assessed above, this situation creates serious impediment on the teaching learning process. This will cause the deaf to fail to properly understand the sign language. When transferring from one region or school to another, they find it difficult to understand the subject matter. Teachers face similar problems as well.

Even though the plasma strategy of education in our country is highly beneficial, deployment of interpreters without undergoing sufficient training in the sign language has its own contribution for the degradation of quality.

I had short time to conduct this research. Questions like whether deaf students correctly know the letters in the sign language and deaf students properly read whatever is written have not been dealt with in this research. In addition, the difference between the understanding of sign language by teachers able to hear and deaf teachers are not assessed in this research. There are also regional states not very well included in this research. Therefore, it is recommended that a researcher be engaged to make assessments that are more detailed.

CHAPTER SIX

6. Conclusion and Recommendations

6.1 Conclusion

The general objective of the study is to assess the Ethiopian sign language using for the teaching purposes in five regional states of Ethiopia. The researcher summarized the results to draw the following conclusions.

- There are variations across regions in applying sign language.
- There are variations across schools in applying sign language.
- There are variations across students and teachers in applying sign language.
- Interpreters in the country have not taken/attended trainings of academic- oriented sign language for sign-language interpretations.
- Teachers, students, and interpreters tend to coin new sign-language vocabularies/words of their own owing to the shortage of sign language in the country.
- Teachers and interpreters are often challenged to appropriately convey the messages contained in the subjects they interpret/teach owing to the shortage of sign-language in the country. This problem was also confirmed during interviews.
- During the application of sign languages, teachers, students, and interpreters fail to use the sign language through the four laws of sign-language: shape of hands, palm position, movement and Location; as such this problem has been attributable to the variations in the application of sign languages.
- A wide array of signs/symbols has been published in various books of sign language.
- Student-interpreters face difficulties in accurately communicating the contents of their respective subjects of interpretation, the propensity of which is reported to have affected the students' respective academic performances.
- It was found out that students with hearing-impairment are interested in being taught by teachers with hearing-impairment than being taught by hearing-teachers, the fact of which was affirmed during interviews with such students.

- As revealed in text analysis, books and dictionaries of sign language available in the country do not conform to the parameters of sign language or scientific requirements.
- Interpreters are often overburdened due to longevity of the time they spend interpreting and dealing with different subjects at a time, the propensity of which was realized during interviews with such interpreters;
- Location/position of classrooms in a number of schools markedly affects the dynamics of teaching-learning process of students with hearing-impairment, a trend which was also noticed during classroom-observations;
- Sign-language interpreters are bored of interpreting the subjects they dislike, the reality which was asserted during interviews with such interpreters;
- Teachers and interpreters often face challenges in exactly conveying the messages of the subjects they assume/interpret to students with hearing-impairment for the reason that such students are always placed in chip-wood-partitioned classrooms, misperceiving/misconceiving the students' disability /audio-insensitivity;
- The required appraisal of academic performances for students with hearing-impairment can hardly be handled unless interpreters are assigned during examinations, the aspect of which was emphasized during group-discussions;
- During the application of sign-languages, teachers, students and interpreters fail to use the sign-language through the parameters of sign-language i.e. 1 shape of hands, 2 shape of palms, 3 hand-gesture/movement and 4 the place where the signs are placed; as such this inability/failure has become attributable to the differences arising out of the application of sign-languages in such a way.
- Educational-interpreters specializing in the subjects of interpretations are assigned for plasma-interpretations, the variable of which was reiterated during interviews.
- Professionals of special Needs Education have been excluded from due involvement in spite of the fact that plasma-lessons/education also apply to those students with special needs, the observation of which was made during group-discussions.

6.1.2 Recommendations

Based on the major findings and conclusion made above, the points have been recommended to solve the problems of communication in teaching and learning using sign language.

1. Educational Interpreters of sign language should be provided with trainings at university/ colleges under special needs education;
2. According to this research, it is advisable if special needs education professionals engage in streamlining the plasma education for the deaf; this will certainly bring about change.
3. The research shows that the assigning of consultants for the interpreters engaged in describing the lessons in the plasma education would be highly effective;
4. The research indicates that deployment of deaf teachers to the deaf students is highly advisable as communication would be more effective;
5. Designers of curricula should also consider the interests of students with hearing impairment.
6. Organization for National Examinations, schools, colleges and universities should assign interpreters of sign language for hearing impaired students whenever examinations are administered, as indicated by the research;
7. The Addis Ababa University, Sign Language and Deaf Culture Department should work in collaboration with concerned stakeholders;
8. The Ethiopian Association of the Deaf should work in close collaboration with schools and organizations where the deaf are found and should provide all necessary assistance in this regard;
9. Depending on to the schools where the deaf attend education, enrollment of students for half day only affects their rights and the study shows that staying in school in both shifts assists in improving quality education;
10. The study shows that deaf students would be more successful if educational interpreter is assigned after the fifth grade;
11. The study shows that provision of sign language trainings to teachers and interpreters in different time intervals will help them improve their understanding of the language.

12. EthSL dictionaries or books should be published and organized according to linguistic principles favorable for sign languages. It should be prepared based on linguistic and scientific research by sign language professionals and trained lexicographers.

13. The published EthSL dictionaries should provide a means to view signs as linguistic phenomenon rather than as characteristic of deaf people that serves only to confirm the severity of their disability.

14. The aim of the EthSL dictionary should be to establish EthSL signs not Amharic or Oromigna or Tigrigna words.

The EthSL dictionaries should be constructed by sign linguists, EthSL professionals, fluent signers, trained sign lexicographers, Ethiopian deaf community signers and other concerned bodies rather