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**ADDIS ABABA UNIVERSITY**  
**COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES**  
**DEPARTMENT OF SPECIAL NEEDS EDUCATION**

**The Practice and Challenges of Sign language at early Deaf education:  
The Case of Special Pre and Primary Deaf Schools of Addis Ababa**

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## **Declaration**

I, Berhane MerdeTafesse, hereby declare that this thesis entitled “The Practices and Challenges of early Deaf education: The Case of Special Pre and Primary Deaf Schools of Addis Ababa” is my original work and it has not been presented for the award of any other Diploma, Degree, Masters or PhD in any University or Institution and that all sources of materials used have been acknowledged

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## **Acronyms and Abbreviations**

ASL	-	American Sign Language
EthSL	-	Ethiopian Sign Language
MOE	-	Ministry Of Education
Sim Com	-	Simultaneous Communication
TC	-	Total Communication
MOI	-	Medium Of Instruction

## **Abstract**

*This research examines the practice and challenges of sign language at early grade and education for deaf children at Alpha and VICKtory deaf primary schools in Addis Ababa. It is a case study research technique, which aimed to examine instructional practice and language development, Communication Approach of the Deaf in class, Teaching/Learning Resources and use of Sign Language, challenges of teaching Deaf learners language, challenges of teaching the practice of reading and writing spoken languages and challenges faced by parents of Deaf children's. Data were collected using semi-structured interview: two school principals and six teachers and also five parents of deaf children were interviewed, and observations were also conducted. The research conducted using a qualitative research paradigm aligns with case study.*

*Those data were examined and presented based on their themes in detail following qualitative case study design method to narrative analysis to achieve the purposes. As the study findings showed, the schools had a well-coming environment for deaf children. On the other hand, the research revealed challenges of deaf schools education practices such as, poor accessibility, inadequate teaching/ learning class room environment, poor Sign language skills among teachers, the sign language and early grade education were also below the standard of primary school are some of the challenges.*

*Recommendations were made towards achieving better practices of sign language and education improving the existing negligible inclusive preschool services like, Sign Language skills, classroom accommodation, and basic knowledge of deaf early grade education and simple curriculum adaptation.*

# CHAPTER ONE

## 1.1. Introduction

This introductory chapter gives 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..

## 1.2. Background of the study

Language is a tool that is used for communication between different people. People express their ideas and thoughts to the community in which they are living. Also, as (Almayhu 2000) emphasized human communication depends from the most part on language and language in turn facilitates and assesses to the culture knowledge of wider society. Indeed, most communication in teaching-learning processes can be done through language.

Sign language is a visual-gestural Language used in the deaf community. As many scholars in the field have suggested, sign language development is insufficient, much slower and less complete than other languages. One of the main problems is that there are misconceptions about Ethiopia Sign Language which is the common language of the Deaf. It is only natural for the Deaf community to develop and use a language that is based on visually perceived signs and symbols in order to communicate spoken languages that are based on sounds and characters.

Use of Sign Language as a means of communication, a Deaf child will be able to master a language on which he can base his academic learning. Also, as Vygotsky emphasized the role of language and communication in the development of the child (1967), it plays a significant role for the psychological development of any human being.

In addition, it is possible therefore that alternative problem solving strategies of deaf children with access to sign language during the early years of development were overlooked (Wolk, 1985). Based on studies made, if a child is not introduced to Sign Language during their critical period, they will not only have no language on which to

base their academic learning. They will also be fighting to reverse this trend of atrophy when they start learning to communicate in a language.

The main problem in EthSL Development at present is that there is no standardization of Sign Language. There are many variations among regions of the country in the usage of EthSL. Ethiopian Sign Language is almost never used as the primary language of instruction. If it is used at all, the teacher signs along with English or Amharic grammar.

Additionally, in our country today education of the Deaf is wholly inadequate. The main issue is accessibility. The method in which a Deaf child is to be educated should be a method that the child can understand. If oral language is not accessible to them, then this method is not going to work to very poor proficiency and extremely poor utilization of Sign Language for teaching the Deaf. A lot of schools are using the 'Total Communication' method which is a combination of signs as well as spoken language.

This leaves these children unable to access the full, natural language stimulation that is so critical to the development of language (Gleason, 2000, p.349). Many studies show that mother tongue-based instruction can improve a child's self-esteem (Appel, 1988). These children therefore need to be exposed to linguistic role models who can communicate with them in Sign Language, which is the natural language of the Deaf. Without such role models, this has serious implications for Deaf children in terms of the acquisition of concepts and the learning of a first language, their as mother tongue's. Not requiring a language can lead to communication isolation, low skills and discrimination due to stereotyping.

UNESCO (2007a) emphasizes the role of early childhood care and development in laying the foundation for learning and setting the stage for successful engagement in formal education. In their critical period for acquiring language, all deaf children need to have given the opportunity to acquire sign language so that they will be in a better position to learn another language from the base of a solid first language.

A child's emotional and social personality can be highly affected and suffer if communication is a problem (Frank-Briggs, 2012). In most cases children who suffer from hearing loss have parents whom are not deaf. The different reason some children's parents do not have the funds to send their child to a deaf school and some of these

children never encounter others with whom to communicate. Instead these children grow and work at home where they use gestures and sounds but do not have a true language.

Parents have found that baby signing can be extremely helpful during these early times in development (Pizer, 2007). If communication between family and children is partial and incomplete then this can affect a child's ability to be part of a social group and develop a positive self-image. Without good communication, a child can be in the dark about the different social norms, rules of conversation and appropriate ways to respond to certain situations (Turnball, 2004).

The 1994 Education and Training Policy and the 2006 Special Needs Education Program Strategic Plan were documents examined for the purpose of this study. The current system is that at present Deaf children do not have adequate access to the school curriculum, and the reason for this is that teachers of the Deaf, in both inclusive and special schools are not proficient in Ethiopia Sign Language (EthSL).

Therefore, my part observations the practice and challenges of sign language of deaf students at early grade level in Alpha and VICKtory special school for the deaf with their teachers and parents briefly investigation. However main objective of the study was too investigated in the current practice of sign languagethat recognizes special Deaf schools requirement for early natural language competence and for appropriate communication access to the curricular material.

In Ethiopia especially, the practice of sign language early grade level remains an under-researched area. Thus, the purpose of this research will be to access the practices and challenges of sign language at early grade level in two special primary deaf schools in Addis Ababa, and provide insights about practical strategies to facilitate and support language development in young children.

### **1.3. Statement of the Problem**

Deaf face many more unique challenges with language comprehension than hearing peers. The deaf are severely restricted from social interactions. To participate in social values, deaf individuals must be able to communicate through a method such as lip reading or learning sign language. Indeed, without a form of communicating with others,

a deaf individual could potentially be cut off from healthy social relationships. Most of these deaf children are born to parents who are both hearing. Some hearing parents have the means of adopting non-auditory forms of communication but most parents lack both the skills and resources to communicate effectively with their deaf and hard-of-hearing children(Mayer, C., 2007).

Concerning that, language acquisition among Deaf people is one of the key issues. Without language, a child is lost. The effective development, understanding, and expression of language are fundamental to any educational experience and are particularly crucial for deaf children. Communication and educational growth depend on a language rich environment, one with ongoing, direct, and age-appropriate language opportunities. Deaf students in developing countries like Ethiopia hardly get the opportunity to attend schools properly and obtain suitable formal education.

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. Despite most of deaf long experience with and relatively large expenditures on deaf students, these students continue to lag far behind their hearing peers on of reading and writing. As deaf children cannot signing and respond to sign language as early, they often develop early language delays that hinder future academic progress.

Research studies tell us that early child is the most important and pivotal period for language learning and acquisition for all children. For deaf children, the consequences of delayed or deprived language development are devastating. Most of the deaf children often arrive at schools with inadequate language skills and subsequently struggle with grade level reading and writing (O'Connell, 2007). The academic struggles are not a result of their hearing status but mainly because of the lack of an accessible rich language environment.

It is critical that the professionals have a more holistic approach to supporting deaf children and their families. This requires using approaches that are centered on the Deaf children and optimal linguistic development via a fully accessible language. However,

the institutions that train teachers of the deaf do not include Sign language as a major component of the curriculum. Hence it can be assumed that upon graduation such trainees may not be well equipped to teach deaf pupils through the medium of their language, Sign language. In most the deaf pupils are not fluency in Sign language Sign language to the level of mastering the underlying system of rules in the language for other academic skills.

Furthermore, schools for the Deaf are places where effective development of sign language can be acquired should get more attention and should be researched explicitly to have effective practices in language uses and language learning. When hearing children in speaking communities learn languages they learn concepts and not written words or their spellings hence why subject the Deaf to learning the spelling of spoken languages right from the start? Deaf children need to learn Sign language.

This is especially the case for deaf pupils born of hearing parents since they are deprived of any form of language during the most critical phase of language development early years. In fact they need a longer time to learn their natural language to compensate for the period when they had no access to any meaningful language which they were supposed to use in forming concepts. In view of all the above noted problems, this study aims to find out how Sign language is used in the education of the deaf in schools and units for the Deaf.

It is hoped that the findings from this study will help the government and other stakeholders in formulating appropriate strategies and policies for the betterment of deaf education. The researcher will focus on the practice of sign language as the first language in the teaching learning process, resources such as and make EthSL a standard of communication for everyone in Deaf schools.

#### **1.4. Objectives**

The major objective of this study is to explore how sign language practices of instructional grade one and two of Alpha and VICKtory special primary School for the Deaf.

The specific objectives are:

- To examine educational classroom communication for deaf students
- To examine the teaching learning resource for Deaf education approach and using sign language
- To highlight practice and challenges teachers meet to include the language in deaf schools
- To find out how teachers are equipped in their language to teach deaf students
- To assess the classroom environments for using sign language as a instruction practice and language and literacy
- To explore the Deaf education approach and languages used in the early classroom

## **1.5. Research Questions**

The central questions that were addressed by this study are:

- How do teachers use Sign language to communicate and educate Deaf student in schools?
- What are the challenges and difficulties of teachers in teaching the Deaf students?
- What are some of the challenges that Deaf children face in classroom environment?
- What are the challenges that parents face in the education of their Deaf children?
- What are the challenges reading and writing of the Amharic language classroom?
- What are the challenges faced by parents of Deaf children's?

## **1.6. Significance of the Study**

The study would provide significant useful information to the Ministry of Education and Training Policy planners on ways and the use of Sign Language as an instructional

method of teaching in the classroom. The findings will form a basis for use of Sign Language for all Deaf in primary schools. The study would help the school administration and teachers to be informed on the effect of Sign Language use. The people and institutions charged with the responsibility of training teachers may use the study in understanding the situation of Sign language in Deaf schools and facilitate any necessary changes. Finally, the study could also be used to provide empirical evidence to other researchers who may want to carry out research in future on factors influencing use of Sign Language.

### **1.7. Scope of the Study**

The study was conducted in Addis Ababa. The study covered deaf Alpha and VICKtory special primary schools for the deaf. The respondents of the study were school two school principals and six teachers and also five parents of the deaf children. The main areas addressed by the study were: Sign Language development at early Deaf education, the school environment that affects the use of teaching Sign Language, teachers' qualification, teaching and learning materials used to develop language and the use of Sign Language in school. Thus, the views of other stakeholders were overlooked.

### **1.8. Organization of the Study**

The study is organized in five chapters. Chapter one consists of the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, scope of the stud , basic assumptions of the study, definition of significant terms and organization of the study.

Chapter two comprises the meaning of Sign Language, theoretical and conceptual frame work and summary of literature review. Chapter three covers the research methodology which includes research design, target population, methods, and data analysis. Chapter four focuses on findings. Chapter five deals discussions, summary, conclusions, recommendations and recommendations for further research.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURES**

#### **2.1. Introduction**

This chapter comprises a review of literature on the issues surrounding practice and sign language at early Deaf education. Due to the non availability of studies and publications on Deaf education in Ethiopia the literature reviewed is not particularly only focused on Ethiopian. In addition we have also encountered general lack of literature in the area of focus of this study. Hence the review does to specifically address only issues of interest in this study. Instead it will focus on issues to do with the education of the Deaf and use of Sign language.

#### **2.2. Theoretical framework**

The study was guided by Naomi Chomsky's theory on Language acquisition of 1977. This theory emphasis; everyone has an in born faculty for first language acquisition, at birth children already have brains whose neural circuits have linguistics information, if nurtured well first language acquisition and use is realized within the shortest time expected. From this perspective, language and cognition emerge in development at about the same time and are intertwined. Vygotsky suggested that learning is a matter of internalizing the language and actions of others. He also believed that children need to be able to talk about a new problem or a new concept in order to understand it and use it.

This can be possible through social interaction. In line with this, the Ecological Theory of Language Acquisitions as viewed by Francisco, Eeva, Lisa, Lisal, &Ulla, (nd) viewed the early phases of the language process as emergent consequences of the interaction between the infant and its linguistic environment. The new born infant is considered to be linguistically and phonetically naïve but endowed with the ability to detect similarity between the multi sensory stimuli it is exposed to. The initial steps of the language

acquisition process is explained as unintended and inevitable consequences of the infants' multi- sensory interaction with the adults.

That is to say that a child acquires language through social interaction with children and adult in an environment. Going further, Vygotsky explained that as a child discusses a problem or task with an adult, the adult supplies language to assist the children in solving the problem and gradually internalizes the language until the task can be completed independently.

Vygostky placed his language acquisition theory squarely on an interpersonal setting, a context which is determined by the culture in which one is reared. Vygostky(1978) emphasized that when we caution children on the proper way of eating we are giving them instruction on the ways of our culture. According to him, socialized speech improves the children's convention of language use, which according to him is self regulatory when they hear their own.

It is in the view of this that Werner(1988) reported that performance in school is related to the way children use language This assertion does not hold for children with hearing impairment since language use here depends on the extent that children hears or understand language. They do not hear enough or be aware of presence of speech. He also noted that children use gestures, sounds to interact with others. This will not work out very well for children with hearing impairment since they receive limited linguistic input and output. Their inability to receive enough sound makes it difficult for them to interact with people around them. They can only use gestures which they are familiar with. Even though they can use gestures and signs for interaction, such interaction can be possible if the children are familiar with such gestures.

Children with hearing impairment do not hear themselves when they speak and lack conversation experience and this in turn affect or influence their language acquisition (Ugwuanyi, 2009). However, the theory is related to the present study because T.C also relies in the use of gestures in language learning and social interaction and when children with hearing impairment interacts regularly with others, their chances of spoken language

will increase since they will be in a better position to mimic the lips of speakers. Considering the theories, each is either saying that language can be acquired naturally or can be learned through imitation of sound and speech and social interaction with adult in the environment. However, what is clear is that children with hearing impairment acquire language by the use of signs, lip-reading, eye contact and body movement and the like. Of all these theories it appears that Skinner's theory is more relevant to this study.

### **2.3. Language Development**

Development for who are deaf differs greatly from babies born with normal hearing. A baby with normal hearing will learn the sound of their mother and fathers voice, and learn to cry when they are hungry to let their parents know to feed them. Beginning at birth a baby frequently communicates with his or her caretakers, by using sounds to do so. Babies are able to learn and take in their environment while adapting to constant change in their development. During this time babies are able to take in new languages; this time is crucial in their language development because they have to be constantly learning.

As children develop they go through different stages of learning words and beginning to talk. Although not all children will develop along these exact times, it is important for a child to be around these ages in their development (Owens, 2012). According to UNESCO (2005) the use of mother tongue as a medium of instruction boosts children's confidence and academic performance. This means that children who start their education in their mother tongue have a good start, and perform better, than those who start school in a foreign language. During infancy stage, parents were the instructors of children using mother as a medium of instruction. As children started to speak, mothers and family members taught them basic knowledge, life skills, and values using a variety of methods such as question answer, storytelling, and singing in mother tongue.

### **2.4. Concept of Sign Language**

Language is a unique communication system governed by rules. The absence of rules renders communication impossible. Sign language has a clearly organized internal structure, and a set of rules according to which units of information are composed. It is a complex linguistic system based on the visual manual mode of communication. Apart

from being rule-governed, languages communicate meanings through linguistic symbols. A symbol represents a particular entity, either abstract or concrete. In oral languages, which have both a spoken and a written system, a symbol may be a written word or a set combination of graphemes, or a set combination of sounds phonemes. Sign language, however, being a purely visual gestural language given the deaf of those who use it, relies on visual representations signs for the transmission of meaning. Sign language has long been treated as an imperfect and unsophisticated communication system manifesting few fully linguistic features.

## **2.5. Variation in Language Acquisition and Development**

Theoretical links of language acquisition to general developmental processes necessarily allows for variation in children's developmental profiles with a concomitant variation in rate and progress of language acquisition. From an emergent's perspective, within the individual child, language develops in tandem with, and is influenced by, physiological, cognitive and social development (Shatz, 2007). This theory alludes to the fact that the acquisition of language has to occur within some environment, setting and in consonance with the social aspects of the human existence.

There was a special liking for this theory in that it focuses on acquisition of the second language. The deaf learners on being enrolled to school have some modes of communication used in their families or in the communities they come from. Even after being enrolled into school, these learners could at times continue to use this mode of communication, while at home. This mode may be in form of gestures or other specific signs. The school programs/curriculum does require that this deaf learner learns another mode of communication often being the Ethiopia Sign language for communication and learning at school.

In most cases the Ethiopia Sign Language is picked through teachers who have been exposed to it or during play time; outside the class hours. Schütz (2007) states that, Language acquisition does not require extensive use of conscious grammatical rules, and does not require tedious drill."Krishen (2003) goes further to name that, "Acquisition requires meaningful interactions in the target language natural communication in which

speakers are concerned not with the form of their utterances but with the messages they are conveying and understanding.

Similarly the deaf persons/learners are very particular with the messages being communicated. This explains why a sign may be required repeated or explained, as signs could distort messages. Krashen (2003), also stated that the best methods were therefore those that supplied comprehensible input in low anxiety situations, containing messages that students really wanted to hear. He observed that these methods do not force early production in the second language, but allow students to produce when they are 'ready', recognizing that improvement comes from supplying communicative and comprehensible input, and not from forcing and correcting production. This is equally crucial. It is my feeling that the teachers handling learners who are deaf and this apply to other learners who are not necessarily deaf, should be very patient with the learners.

There could be a possibility that some of these learners may have other disabling conditions. Their language involves total use of vision. Naturally this theory allows for a more relaxed and friendly mode of learning, as it allows the learner to learn at his pace and content that he/she would like to hear know. He further claimed that in the real world, conversations with sympathetic native speakers who are willing to help the acquirer understand, are very helpful. To me this is also very critical. A teacher may not necessarily be an expert in the language for the deaf learner.

There could be other deaf peer's children, persons who know Ethiopia Sign Language much better than the teacher, or even deaf persons in the community who could be engaged as resource persons. This does not imply that they take over the teaching. The teacher still remains at the fore front of ensuring and teaching the learners, given that it is his or her role. The teachers should be able to access the pre requisites that the learner who are deaf need in order learn to read and write, one can provide the learners with pre-reading activities such as looking at sign pictures, sign maps, sign diagrams, writing style.

## **2.6. Use of Sign Language in Schools**

The developed countries concern of Oral Language has shifted to Sign Language communication. Accepting the use of Sign Language at least in principle opened classrooms to natural language of the deaf. The first kind of communication is what is referred to in the United States and Canada as American Sign Language (ASL) (Stokoe, 1992). In Ethiopia, Sign Language has grown and developed into Ethiopian Sign Language (ETHSL) Similarly, Nordic countries also left their footprint in sign language use in Deaf education (EthSL Dictionary, 2008). ETHSL is accepted as the mother tongue for children who are deaf.

It is also the medium of instruction for learners who are hearing impaired in all preschool and lower primary levels and secondary. At higher levels, Ethiopian Sign language usage and Signed Amharic are used interchangeably in addition to usage of other components of Total Communication during the learning process and in other curriculum activities. While children with hearing abilities acquire language spontaneously from members of the family and community, those with deafness come to school without any structured language skills.

It is in hearing impaired schools that children are taught Sign Language that it enables the teaching and learning process to flow smoothly. Ramsey (1997) argues that for deaf children to approach print they need access to an intelligible social context but which also provides resources for the tasks they have to do. An effective class of the profoundly deaf would best be one where interface discourse is structured by the sign language used in the ways the native speaker uses for organizing interface, teaching learning and any other discourse.

American Sign language (ASL) for example has been claimed to be a powerful mediator for deaf children learning, specifically because it is a natural signed language with a long history of use in deaf communities (e.g. Padden & Humphries 1988, Lane et al. 1996). It is also observed that ASL is not the only resource signing deaf children need at school. Critical to teaching and learning processes is the well planned instruction in Amharic, vocabulary, Amharic grammar and the structure of written texts (for those who use it).

## **2.7. Communication Approaches in classrooms**

Total communication is the use of any means of communication such as sign language, voice, use of sign and speech at the same time Simulation com communication, finger spelling, lip-reading, amplification, writing, gesture, visual imagery (pictures). Often the Simulation com communication method tends to dominate in use of total communication. It is philosophy is that the method should be fitted to the child, instead of the other way around (Berke, 2011).

Total Communication approach; holds that learners and individual unique personalities have a right to accessible and comfortable communication modes. Total communication hence, recognizes in totality any form or method of communication that works (Fitzpatrick, 2011). Sign language and its viability as a natural language, many educators began to reconsider manual communication, recognizing that very few deaf students become orally successful and most needed additional visual input, to reintroduce at least some form of manual or visual communication in the schools.

Total Communication was less a method and more a theory in which educators were encouraged to use any and all methods that would benefit deaf students (Scheetz, 2001). While Total Communication included amplification, speech therapy, speech reading, writing, pictures, and signing; in practice it was commonly believed to mean speaking and signing at the same time or simultaneous communication (Lane, 1999). Teachers attempted to use spoken English and some form of sign language simultaneously. Findings indicate that spoken and signed outputs by teachers using simultaneous communication (SimCom) were not comprehensively communicating. Some of the content given through the spoken English was not covered by the signs. (Johnson, Liddell & Erting, 1989) Simultaneous communication is another commonly used manual method which has some similar features with TC and sometimes is taken as another name for total communication. However, Simulation com communication 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) (Zapien, 1998 and Reagan, 2001). Manual Codes for Speech Language According to Zapien (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. 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. According to scholars 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.

The other method of communication is 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.

## **2.8. The Literacy Levels and the Status of the Deaf**

According (Almayhu 2000) research study reports that Deaf education was out of the scope of the society in Ethiopia before the First School for the Deaf opened in 1960. Sign Language became the language of instruction as well as a taught subject itself in 1997.

In Ethiopia, the development of the first refined Ethiopian Sign language started at Mekanissa School for the Deaf in Addis Ababa, Following that, the Baptist Mission founded the Alpha School for the Deaf in Addis Ababa in 1967. While resident at 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). Deaf students pooled their knowledge of signing, refined their signing and established the

means of communication for the Deaf community that was created when the mission opened Meknisa School for the Deaf in 1955.

At that time, In 1979, the sign language started to be combined with Amharic. Consequently, the first Ethiopian Sign Language (EthSL) book produced with written Amharic captioning (Hailu, 2003) and also a few other activities for developing the language started to appear. 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).

Ethiopian Sign language was developed and refined by the Deaf pupils themselves. This clearly demonstrates that the school system is one way through which any language can be standardized especially if it is formally taught. 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 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.

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.

## **2.9. Practical Information for Language Teaching**

It is important to recognize the differences between hearing and deaf cultures and be at least aware that the differences exist. Teacher should be aware of the differences between cultures and also should know about students needs. Though, teacher should not make mistakes in a way of working with deaf students just as like with hearing students. Language is very crucial to this study for the obvious reason that the study itself is about two critical aspects of language; language acquires and develops. It is also either through the existence of a language skill or use of language such as communication, that language itself can be learned or developed. Language can either be transmitted through signing /sign spoken language or home language communication (Braboh E G (2002). As for the case of the deaf, language is commonly engaged by use of signs. The learners who are deaf would best learn language through communicating with those who have the skill or know the language the deaf persons use.

Part of the debate about language acquisition and literacy development in deaf and hard of hearing children; centers around the accessibility of language and communication (Briggle, 2005, Marschark, 2001). Language teaching is always accompanied by teaching of the culture, either indirectly or directly; given that language itself is an integral part of culture (Snell, 1999). This is crucial to the deaf as often they regard themselves as those whose experiences are influenced by the deaf culture.

Language has been discussed by various authorities and presented in many forms. This research associates with the following discussions. Richards (1994) observes that in reality, language is the medium that structures teaching and learning. Most schooling activities are hence shaped by language as it is used in classroom school communication. The linguistic relativity or „Whorfian Hypothesis“ (Whorf, 2006) on the other hand holds that the language an individual uses will influence the way he or she perceives and organizes the environment.

Since the discussion is centered on the learning of the deaf to read and write, it is prudent to define the language used by the deaf. The World Federation for the Deaf (1993) explains sign language as a type of language that uses hands, eyes, the mouth, body movements, sometimes accompanied by gestures. One uses the eyes to see the signs,

hence often referred to a visual language. Sign languages are structured differently as compared to the spoken/written languages surrounding them.

Learning to read and write in Amharic or in any other language, for a deaf signing person, involves also the learning of a new language system; one which is not accessible for the person in its primary spoken modality. The intricacy regarding language; however, for the learners who are deaf is centered on the fact that the learners who are deaf are faced with various modes of communication. At home, because the community or the parents may not have any specific sign language to use; the home-sign systems (the Iconic, gesture systems) are used for communication. Much as the Ethiopian Sign language is expected to be used by the deaf community, this too, is not readily available at the community or home levels.

At school, the deaf learners are too instructed through use of the signed Amharic (the signing used by the hearing teachers, given that they commonly use signed Amharic for instruction. This is often used by the teachers who haven't mastered the Ethiopia sign language. Some learners may however be instructed in the Ethiopia sign language by teachers who have got training or been exposed to.

## **2.10.The role of Sign Language in deaf students Education**

The single most important contributing factor to poor literacy acquisition in Deaf people has been identified as the language of learning and teaching. In schools for deaf children mostly use spoken language, for example Amharic, rather than the Signed language. Unlike the practice of teaching as the primary language of learning and teaching facilitates access to an appropriate language system through which content knowledge, be it numeracy, science or history, can be absorbed. However, since signed languages do not have a written form, Deaf children taught mainly in signed languages still face the challenge of learning to read and write in a non-signed language. In order to develop textual literacy skills, they have to learn an additional language. For them, the process of learning to read and write is inevitably a matter.

Deaf students, therefore, may be learning EthSL as their primary language of communication under optimal conditions, may encounter Amharic as the dominant language of learning and teaching at school, and may come from families who speak yet

another Amharic language at home. Thus, they potentially find themselves in a position of having to know at least three languages as Signed languages simultaneously, at different levels, and for different purposes. The bilingual approach to literacy education for Deaf students is principally based on the Linguistic Interdependence Principle (Glaser & Van Pletzen, 2012) which posits that a common underlying proficiency across languages will allow positive transfer to occur from a first to a second language if there is adequate exposure to the second language and motivation to learn.

Children with hearing impairment may have partial or full hearing loss in one or both ears (Gudyanga et al., 2014). The characteristics exhibited by the students depend on the degree of hearing loss and the onset of such loss. Gudyanga et al. (2014) citing Chimedza& Petersen (2003) said, earlier the hearing loss show itself in a child, the more difficulty he or she will have in developing the spoken language. A hearing handicap or deafness involves not only the loss or impairment of hearing, but the loss or limitation of the ability to acquire language and speech naturally or spontaneously (Gudyanga et al., 2014). Impaired or total lack of language has serious implications for the child's development. It is worth noting that the characteristics of a child with mild hearing loss are, in many ways, more similar to a hearing child's than a deaf child's characteristics.

It causes a number of other serious problems that are linked to the inability to receive or express messages and thoughts (Adoyo, 2008). According to Gudyanga et al. (2014), because of its insidious and hidden nature, hearing loss can be devastating. It can be particularly traumatic because it is often mistaken for absent-mindedness or senility. For most learners, having hearing loss threatens their self-image and may manifest as feelings of inadequacy, being constraining to other people, being abnormal or handicapped. Most of the literature is in agreement about the feelings people experience when they lose their hearing. The literature has shown that deaf children are less socially mature than hearing children, and that the gap between hearing and deaf children widens with increasing age (Marschark, 1993 as cited by Gudyanga et al., 2014). It has been shown that deaf children and deaf adolescents generally have less positive ideas about themselves than do comparable groups of hearing peers. It has also been reported that there is a high incidence of emotional and behavioral problems in hearing-impaired children of all ages (Grosjean, 2010).

Reasons advanced for the difficulties of deaf children include absence of interaction and appropriate mode of communication among these children and their hearing parents (Gudyanga et al., 2014). The delayed language development experienced by most hearing-impaired children results in more limited opportunities for effective and satisfying interaction. Unless a hearing-impaired child has other disabilities such as brain damage, there is no causal relationship between deafness and intelligence. However, the child will be slow in reaching his or her full potential without early stimulation and training in communication (Grosjean, 2010).

They add that language is not a necessary ingredient for complex cognitive processes. It is a misconception that the hearing-impaired are limited in terms of cognitive development. It has been proven that they are not delayed in terms of visual-motor-perceptual functioning. This may be the case if brain damage is involved, but if the disability is solely in the hearing mechanism, then this appears to be false. Deafness itself does not affect a person's intellectual capacity to learn, and deaf children have the normal range of intelligence when tested on performance rather than on verbal ability. Gudyanga et al. (2014) point out that this is particularly so in deaf students of hearing parents as compared to their hearing peers.

The ability to read, which relies heavily on the main language skills, is cited as the main area affected (Glaser & Van Pletzen, 2012). Even at school-leaving age, deaf students are still known to have poor reading attainment levels. Generally, it appears that the child's social development (through socialisation) is closely related to his or her normative cognitive development. If the child's cognitive functioning is limited, or development is hampered by certain conditions such as hearing impairment, social and normative development will likewise be deficient because the inadequate acquisition of insight into what is acceptable and unacceptable abstract values will cause problems (Bank, 2015).

Deafness is often mistakenly associated with helplessness and the need for protection. Hence, the greatest obstacle facing the hearing-impaired child or adolescent is not the hearing disability, but the failure of parents, professionals and the general public to understand and accept the person with this disability (Bank, 2015).

## **2.11. The Process of Language Learning**

The study is investigating how deaf learners are taught how to develop language early. There is no way one can be taught without learning being the outcome or output given the timing and who evaluates. This research benefits from several discussions on learning. Specifically it focuses on the social and individual learner attributes in a school teaching and learning situation. Meadow 1968, Kyle 1994, Fischer 1998, stated that the schooling context (the platform for learning) focuses on learners' as social beings; on schools as sites where group life takes on great importance and focuses on interaction with others as the driving force in learning and development.

The context of schooling and the people they interact with deaf and hearing peers, their teacher and interpreters, played a critical role in the lives of the deaf learners, and particularly if they returned to societies where there are few people who sign. Ramsey (1997) concluded that for all children, teaching and learning have powerful social roots. This tally with Vygotsky's (1978) strong claims that learning awakens a variety of internal developmental processes which are able to operate only when the child is interacting with people in his environment and in cooperation with his peers. Vygotsky's (1978) account of learning and development explains that the children's ability to learn depends on external supports, tools and objects both material and symbolic. Vygotsky (1978) observed that "the tool's function was a means by which human external activity was aimed at mastering and triumphing over nature".

Kozulin (2001) considered the concept of "psychological tools" as the cornerstone of Vygotsky's (1978) socio-cultural theory of cognitive development. He elaborated the psychological tools as the symbolic cultural artifacts involving signs, symbols, texts, formulae, and most fundamentally, language. To him it was the language that enabled one to master psychological functions like memory, perception, and attention in ways appropriate to one's culture. Uttal and DeLoache (2006) observed that using the concrete objects in a symbolic fashion as representations of the contents of boxes helped children gain insight into the idea of using letters as representations.

They, too, noted that all symbolic objects have a dual nature as they are both objects in their own right and representations of something else. In the use of a symbol as a

representation of something else, hence, one must focus more on what it represents and less on the symbol as an object. Material tools could include crayons, scissors, pencils, and line paper, while the symbolic ones could include alphabetized lists of words on bulletin boards, calendar, classmate finger spelling and written text, entries in their own journals used as lexicons or glossaries, and finger spelling. With these, the learners can engage with their context, both the immediate, local setting (e.g. classroom) and the historical and cultural features transmitted by the settings.

Evidence on the use of the language, the focus on literacy, the organization of space and of equipment and the teachers' pedagogical methods indicate these aspects as very crucial. Vygotsky (1978) recognized the distinguishing mental process of signification by which humans assign meanings to arbitrary stimuli. To him it was with these „meanings“ that human learning was determined by the social and historical context; leading to his belief that human development and learning occurred through their interactions with the environment and the other people in it. This interaction between the teacher and learners, let alone between the learners themselves, is very crucial in development of sign language. The deaf learner benefits from being surrounded by persons who are proficient in sign language in order for him/her to develop his or her own proficiency.

## **2.12. Teachers' Qualification and use of Sign Language**

Teaching styles and high quality of education depends on the quality of the human resource available and this can be found in teachers (UNESCO, 2004). Education must offer an instrument of change and development and not only to focus on the availability of teachers. The teacher factor is important as a basis to academic achievement (World Bank Report, 1986).

Teachers' qualification is a technique that is widely accepted (Carr-Saunders and Wilson 1994). Problems that lead to poor quality education persists because of the shortage of both qualified and properly trained teachers. This has impacted negatively on the academic achievement of the learners (UNESCO, 1991). Earlier, teachers without proper academic qualifications and professional training failed to do justice to their subjects.

High qualifications develop self confidence in the teacher who in turn serves as a source of inspiration to his/her pupil (Kiarie, 1996). He further suggests that a teacher must

possess theoretical knowledge about human learning behavior, demonstrate better teaching skills and facilitate pupils' learning. A teacher must also display positive attitude that foster learning and genuine human relationships and also should have knowledge of the subject matter. It is noted that learners' academic performance level is caused by teachers because it's them who most matter in a child's life in school (Ominde, 1964). If a teacher lacks in appropriate qualification and self confidence, then he has a lower self esteem due to lack of content mastery that leads to poor performance by learners.

Teachers' academic and professional are prerequisite to the mastery of Sign language that contributes to the nature for pupils' performance; citing lack of efficient use of Sign Language in teaching methods as good setup reflection of teachers' professional qualification (Kathuri and Nyaga, 1997). Teachers must master Sign Language Structure before she/he develops Signing Skills that will be used at all times for proper learning to take place in the classroom. Sign Language therefore plays a pivotal role that affects all activities in the school (Oracha, 2007).

Teachers are instrumental to the successful implementation of Sign Language in schools for the hearing impaired. Teachers' abilities and attitudes can be major limitations to learners' academic performance (Lieberman and Houston, 2009).

Teachers' attitudes which do not promote the use of Sign Language are fear, limited expectations and lack of signing skills. Teachers' unfamiliarity with disability often results to poor academic performance in the classroom. Therefore sensitivity and awareness on the part of the teacher in school is essential towards the promotion of Sign Language use (Hodge, 2004). Studies have shown that if a teacher has low expectations towards deaf learners then the children will unlikely receive satisfactory education in Deaf schools.

Deafness is a low effect of disability; many teachers do not have a strong knowledge about learners who are deaf. To ensure that students who are deaf receive the quality education they deserve, educators must understand the learning needs of this population" (Briggle 68-69). In the following paragraphs, we will look at some practical advice for teaching language to deaf students.

### **2.13. School Principals' role in enforcing the use of Sign Language**

The head teacher has a role in enforcing the use of Sign Language in school as the school is the best place where any intervention takes place. Therefore, the School Principals have an important role in making sure that teachers under him/her have mastered Sign Language (Carol and Chau, 1996). Most teachers in any school will not use Sign Language in classroom work unless they are supervised by their leader. The School Principals should also master Sign Language and teach lessons for the teachers to emulate before so drawing up work plans or schedules among others (Codally and Nystrand, 1983).

The quality of the head teacher is very crucial in determining the use of Sign Language outcome in her/his school. He is the most important influential individual in a school therefore he must have good managerial skills set for the benchmark. The School Principals should ensure that school follows signs agreed upon to be used for teaching in the curriculum and that Sign Language is effectively implemented in order for the school to achieve its goals, the main one being academic excellence (Hinger, 1995).

### **2.14. Teaching/Learning Resources and use of Sign Language**

The experience of using a range of teaching/ learning resources and related equipments, supplies, furniture and various forms of printed media for teachers are critical in facilitating the process of teaching and learning worldwide (UNESCO, 2007). These resources include hearing aids that offer services to teachers to enrich their teaching. However, the resources are expensive and need a replacement (Koech, 1999). The high expenditure incurred on repair can be cut down by training teachers on how to use maintain the equipments with proper instructions to learners on how to use them.

In the United States of America (USA) 50% of teachers reported to lack adequate teaching materials (Good, 1999). Differences in school facilities seem to account for differences in achievement. Facilities such as library, textbooks, laboratories, dormitories, visual aids, electricity, water and playing grounds enhances better learning (Postlethwaile, 1998). The central role that learning materials play towards the quality of education impact of the work and motivation of teachers and the pupils which

undoubtedly constitutes an important factor in the academic performance and the success of any learner (Lockheed and Verspoor, 1991). He further stated that to improve learning, teaching resources like visually-based resources for use in the classroom including pictures, graphics, and video should be used as instructional materials at all levels of teaching because they reflect and deliver the curriculum.

The report on studies carried out in Malawi and Guinea Bissau which established that teachers lack essential teaching materials such as teachers' guides and other pedagogical documents to accompany the text books contributed to poor performance of the candidate at the examination level. Also lacking were teaching aids such as globes, wall maps and laboratory equipments. Some schools have no proper classrooms that affect the quality of education leading to low academic achievement and poor performance in examinations (Blackman 1992; Jakupcak et al. 1996).

Lack of teaching equipments in most rural schools have discouraged the teachers from doing their best when teaching. He concludes that if schools were well equipped, they would motivate the teachers to facilitate learning. However, as Blackman and Jakupcak (1996) noted that teachers were not innovative enough and failed to utilize and improvise from the resources available from the school environment to improve their teaching. He also argues that it is not only the availability of teaching resources that can motivate use of Sign Language but rather how teachers make proper use of the teaching resources provided.

## **2.15. Challenges of teaching Deaf Learners Language**

A number of scholars have conducted studies regarding the challenges the deaf learners encounter while learning to read and write; some of which this study has highlighted. Marschark et al,(2009); revealed that reading achievement among deaf students typically lagged significantly behind hearing peers. Difficulties in comprehending sign language just as the texts suggested that difficulties frequently observed in reading from the text by the deaf learners, could involve more than just reading.

Difficulties in phonemic awareness (Harris & Beech, 1998), vocabulary (LaSasso&Davey, 1987; Paul, 1996), syntax (Kelly, 1996; Quigley, Wilbur, Power, Montanelli, &Steinkamp, 1976), and the use of prior knowledge and Meta cognitive

skills (Jackson, Paul, & Smith, 1997; Strassman, 1997) were some of the factors reported to influence deaf and hard-of-hearing children's development of literacy. This demonstrated that many deaf children seemed to have difficulties with both low-level and high level reading skills (Kelly, 1995; Paul, 2001). Loeterman, Paul and Donahue (2002) also believed that for any instructional reading program to be effective, it needed to address the development of skills such as word identification, word knowledge, and comprehension.

Marschark (2006), however, claimed that there was much that was not known about the deaf learners reading. To him the lack of progress in promoting deaf students' reading achievement was largely the cause of the wrong directions taken. He strongly believed that the challenges in educating students who are deaf usually ascribed to reading and writing were not literacy-related at all. He observed that the students who were deaf made the same kind of mistakes in reading and writing as those made by people learning English as a second language. This observation was however on students of a higher grade. It remains to be investigated whether the same pattern would be applicable to the learners who are deaf and are at the primary school level. Eisenbraum et al. (2011) noted that learners who were hard of hearing or were deaf used many communication approaches and this had instructional implications.

Some of these learners unfortunately were in classes where the teachers didn't know sign language, and a sign language interpreter had to be brought into the classes to provide sign language interpretation. Eisenbraum et al (2011) also observed that there was no consensus among researchers, educators, parents, or those who were deaf or hard of hearing about the best reading strategies for students who were deaf or hard of hearing. Chamberlain (2002) argued that reading development is contingent on a fully developed primary language, and that incomplete or inconsistent signed or spoken language may affect the development of reading proficiency.

## **CHAPTER THREE**

### **METHODS AND PROCEDURES OF THE STUDY**

#### **3.1. Research Design**

Gall, Gall & Borg (2009) defines research methods as sound plans for selecting research sample, collecting data and analyzing data. If the plan is flawed, then the results of the study would be difficult or impossible to interpret; for drawing of conclusions. Given the nature of the topic, which has yet not had a significant attention for research in deaf special schools, to save its complexity, I had to make a decision to adopt a design that would provide a deeper understanding of the challenges of teaching the learners and how to practice of sign language at early grade one and two level.

Thus, this study used the qualitative approach, according to Gall, Gall & Borg (2009), qualitative researchers aim to gather an in-depth understanding using this approach. Given the lived experiences of a limited number of trained special needs tutors and deaf students, the embedded case study design, a category taken from Gall, Gall & Borg (2009), was used in this particular study. This study treated practice and challenges of sign language at early age as a phenomenon.

This method involves an intuitive and reflective scrutiny of the sense giving acts of consciousness but prior to their conceptual elaboration. It also indicates the process as involving a description of phenomena in the various modes in which they are present to consciousness (Gall, Gall & Borg, 2009).

The design allows flexibility, as the phenomenon is investigated in its natural context and setting (Gall, Gall & Borg, 2009). This is supported by the field data collection guide: The qualitative research method allows flexibility for the researcher to probe further. The qualitative study has several advantages in that probing gives the respondents opportunity to respond in their own words, other than forcing out responses. It uses open ended

questions that have the ability to provoke meaningful and culturally salient responses coupled with unanticipated responses by the researchers. Finally, the method is rich and explanatory (Marshall & Rossman, 1999).

The teachers were observed teaching in the classes they always taught and in the nature the classes had always been. Thus I had to prepare the learners regarding the video-recording. Likewise the learners were not coached for the exercise. I equally made sure that whatever step taken, was carried out with permission the school principals and teachers in special schools for the deaf.

## **3.2. Sampling Criteria**

### **3.2.1. Selection of the Schools**

All the schools selected were deaf special schools; Deaf is taken as the site of the study. I thus selected schools for the study through purposeful sampling (Gall, Gall, and Borg, 2009, Patton 1990). I preferred to engage in only two special deaf schools to keep the number small and to create a favorable condition for a qualitative study.

The researcher believes looking at the practice of the school which has had better experience helps to understand the early grade level of practice sign language in reached on at its best. Before conducting this study the researcher visited almost three schools for the Deaf in Addis. With that preliminary assessment, it could be understood the school appeared to be the best from all researcher preferred to examine the practice at these schools in to create a favorable condition for a qualitative study, could be a foundation for further researches in other schools and also to take corrective measures in the area.

Although a grade levels in focus also were chosen purposefully. Two classes of primary first cycle grades are taken as grade one and two 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). The specific schools I had focus on were thought to have done without relevant staff and necessary support for some time and wouldn't be informing the study.

### **3.2.2. Criteria for choosing the schools**

The study was conducted in Alpha and VICKtory special schools for the deaf both in Addis Ababa. The head teachers of the selected schools were to be respondents while the teachers engaged depend on the selection of the classes to be involved with informed guidance by the schools principals given the criteria for selecting the respondents for the study. Two teachers school trained as special needs teachers and teaching learners who are deaf in early grade 1 and 2 were selected.

All the teachers selected were teaching deaf learners and were trained teachers who had at least attended a short term training course on sign language and particularly related to deafness. I had to note whether the teachers had been specially trained in special needs before and whether they had been to teach. Since the data collection also involved observation of lessons being taught, six teachers would be teaching although in one school two teachers shared lesson which change the number of teachers from the initial planned number of six to seven teachers because I found it important to include all the data. Since the data collection also involved observation and recording of lessons being taught, six teachers would be recorded teaching although in one school two teachers shared a lesson which change the number of teachers from the initial planned number of six to eight teachers because I found it important to include all the data.

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

In this study, two methods of data collection were used: Interviews and Observation. Video recordings in the classrooms were not allowed by the schools, but I observed the factors of language development and strategies for facilitating instructional language development, challenges involved in teaching reading and writing to the deaf learner. Interviews were used as they are instrumental in gaining first-hand information from the respondents (Gall, Gall & Borg, 2003).

#### **3.3.1. Semi- Structure Interview**

As Cohen Manion (2000) point out, the interview can serve a number of distinct purposes. First, it can be used as the means of gathering information about a person's knowledge, values, preferences and attitudes ( Gray and David ,2010). It was used to collect information from the total participants of grade one - two teachers study in both schools

(five). Participants (six teachers, two principals and ten parents were interviewed regarding their practice and challenges of view about the inclusion of Deaf students in the regular school. Interview made with the targeted people to express their experiences, opinions, feelings and knowledge.

With semi-structured interview method, it was possible to ask follow-up Appendix to in order to get richer information. Informants were available to clarify immediate concerns and un clear statements (Gall,Gall&Borg,2007). Also through the establishment of true stand rapport with the informants, a researcher is likely to get more information by using semi-structure interview compared to the methods of data collection. Therefore interactions were made possible before the interview session to build trust and rapport with the informants. An interview was carried out with every teachers elected to participate in the study. The time arranged for an interview was approximately 45 minutes for every teacher. The interview questions were formulated on the basis of the main research questions and sub questions. The research questions were translated from English to Amharic and sign language the language of the practice of sign language early grade level in all primary deaf schools. For this reason, all respondents were interviewed in Amharic and sign language for better communication between the interviewer and the interviewees.

The interview sessions were as follows: Alpha teachers were interviewed first. For Amharic teachers, the interview took place in the morning before the students came to school, and for sign language teacher, the interview was done after the students had gone home. From Victory Teacher Amharic and sign language teacher was interviewed while the students were out for break and launch time. The interview with parents was done during class hours. The school principal was responsible to choose the parents because knew the parents very well thus it was easy to contact the parents and ask for a short informal with the interviewer.

After getting permission from all four informants, an audio-tape recorder was used in order to maintain the original data. The audio recording provides a complete verbal record , It can be studied much more thoroughly , and it speeds up the interview process (Gall,GallandBorg,2007).Audio recording was especially important because the

interviews were in Amharic and sign language and I had to translate them into English .

### **3.3.2. Classroom Observation**

A total of six classroom observations have been done for 5 weeks. 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 also use of note taking as data collection instrument due to budget constraints. 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 practice of sign language as a medium also were gathered via the observations. The practice of teaching learning process, student teacher and student interactions with regard to language use in classrooms were all observed from the beginning to the end of each session. Finally parent sign language with the communication skill also was evaluated in reference to the observed facts in the class teaching-learning process.

### **3.4. Instrument Development**

Development of interview guiding that used to collect qualitatively significant data during the interview session. The interview guiding I prepared help to me to explore asking question fear that could illuminate the practice of sign language experience of deaf teachers. In consultation with the advisor and all the way through review of literature, the researcher has developed the instruments used in the study. The following sequences of activities were maintained during stages of tools or instruments development.

- The tools were repaired by the researcher and given to the academic advisor for approval.
- The instruments were prepared in English and translated to Amharic and sign language the translation was made for the clarity and to minimize biased. It also necessary for collecting data with the help of sign language deaf teachers.

Therefore, it is expected that relevant data for the study was collected through semi structured and open ended interviews and discussion and observation.

### **3.5. Methods of Data Analysis**

This research aimed the practice and challenges of sign language for deaf children at deaf primary school in Addis Ababa. In this chapter the data collected through set of interviews and observation document review are organized and structured so as to make the data manageable for analysis.

The data analysis was made qualitatively in a narrative way on the basis of the data gathered from interviews and observation. This chapter deals with two sections. The first part dealt with the demographic characteristics of the respondents and the second part dealt the main data finding. The study aimed to investigate factors that contribute towards the effect of sign language barriers among Deaf learners in a special school.

The data is presented following the critical components that form the body of any classroom lessons. I used these components to develop the themes/categories for data analysis. 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 both deaf schools for the Deaf. The selected issues, instructional practice for language and literacy development, deaf communication approaches in the classes, are categorized and presented as different but interrelated topics.

Teaching/learning resources and use of sign language availability, the challenges parents face are the major issues raised in relation to sign language use in early grade 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 practice of sign language. Under each theme, the data gathered from classroom observations, interviews analysis were systematically presented and analyzed to yield justifiable generalizations of the study.

Instruction practice for language and literacy development in the classes is the other theme for analysis. This theme could show what languages used in the classes, for which classroom activities and how presented and analyzed.

Under the theme of 'Deaf communication approaches', the data that have relevance to show what communication approaches and how they practice 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.

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 lack sign language of the teachers. Thus data that can be evidence for the skill of the teacher's sign language get analyzed. Since the study focuses in classroom language use, the data only from the observations and the interviews are presented under this topic.

The final theme I engaged covered the challenges parents' face in relation to signed language. It 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 medium of instruction presented and selected under this topic.

The chapter is structured in such a way that the first part covers the respondents (the teachers, the school principals and parents); the second part covers the teachers from each class were observed and interviewed to collect information on the issue under study. A total of six teachers were involved in this research; of these, only a single teacher is Deaf. With regard to their qualification, it ranges from 4 complete teachers to diploma holders. Two teachers are 2 grade graduates with more than 20 years experience in Deaf

teaching. The training in Sign language of the certificate holders ranges between a three months up to six years.

The other subjects of this study are school principal: 1 school principal qualified with degree in language teaching with 5 years experience in teaching the Deaf and the other school principal has a 12 year teaching experience of the deaf.

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 2 are first degree holders.

## CHAPTER FOUR

### FINDINGS AND DISCUSSIONS

#### 4.1 Introduction

The purpose of this study was to look the finding of practice and challenges of sign language in early in early grade level deaf students in deaf special school Addis Ababa. In this chapter, therefore, the data collected through interview, and observations on the basis of the given responses by the participants were analyzed qualitatively. The main findings of the study are presented in the following manner.

#### 4.2 Instructional Practice for Language and Literacy Development

Proper practice of sign language early grade one and two is important aspects of quality education. Particularly in EthSL language which can serve for educational mediation, and then is expected to from early Grade level, including language in all aspects of schooling activities are expected to participate equally. Since, this age will determine children future education performance and will have lifelong effect; things must be done to make the pre-schools to be suitable for the children.

As data from different sources shows, the communication approach Alpha School for the Deaf is trying to follow is still Total Communication. The discussion with teachers also strengthens sign language is incapable to mediate education. On the case of practicing of mediate education sign language in the early class, Alpha School principals responded as:

*Actually there is practice of sign, however, I have trouble to say that, there is proper practice of sign language as language of instructional in all class rooms. On the other hand, there is a gap between the every single Amharic word and utterances in sign. It is difficult to match every single Amharic word and utterances in sign. However, there is goodwill among the deaf and the school but no written document as a guide to be used.*

As we understand from the above interview, the Alpha school principal is not confident to inform us there is successful of sign language instructional practice for Language and Literacy Development in the early grade one and two classes. This means as the principal

information showed us it is difficult to say that, there is no exact way of Instructional Practice for Language and Literacy Development.

The VICKtory special school principal also responded similarly as:

*Some teachers think that the use of two languages is helpful as one can use the mother tongue to explain difficult concepts once the transition to Amharic has taken place in our school. However, there is a wide gap between the actual practices vocabulary of EthSL and the expected standard to be met. Our instructional practice of early education is on the process of progress, even if it lacks many things.*

The principal also tried to explain the process they were passing through to instructional practice for language and literacy development. 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.

Regarding to medium of instruction, the Alpha school principal responded as:

*There are challenges with regard to teaching technical subjects due to lack of appropriate sign. As it is less language dependent, it is easier to manage through Amharic than other learning areas. Some were able to suggest a staggered transition to Amharic on a subject-by-subject and grade-by-grade basis, also a sign language is incapable of explaining the subject matters efficiently for the better medium instructional practices of early grade child grade one and two education in the future.*

Similarly the VICKtory school principal informed as:

*Transition to sign language medium as soon as possible wing to the wash back effect of sign language medium higher up the system if one does not have Amharic early enough, one will not cope with the pressure of the whole curriculum in Amharic. Learners do not understand the content of the lessons in sign Amharic medium from grade one onwards, more difficult learning areas in terms of Amharic and English language, Science and Social Science.*

The VICKtory and Alpha special schools principals' responses revealed that there are not successful medium of instruction. However, they face difficulties in explaining some difficult concepts once the transition technical subjects, specifically in sign, while they use Signed Amharic. They also believed that the EthSL is incapable to mediate education at the early grade level, even if the practice is followed by different challenges. In the interviews, the teachers explained that they practice different strategies like using properly signs, examples, drawings, demonstrations, to complement what the language lacks.

Alpha teacher informed as:

*Because the language lacks vocabulary and is inefficient to be a medium of teaching and learning, we are trying to use drawings, demonstrations, facial expression, gestures, and animation to supplement spoken messages as these generally be much more readily understood.*

Similarly a teacher from Alpha said,

*There is lack of subject related Sign language dictionaries which used for reference purposes. Therefore, I face some challenges when I explain some topics. I tried to create new signs to express new concepts, while I use Signed Amharic,*

One teacher from Alpha expressed his experiences as follows:

*Sometimes we literally read together with learner how some words are signed. When we come across difficult words where no sign exists, we simply explain the meaning of the word or concept, fingerspell the word and / or sometimes picture, gesture, facial expressions approach.*

In the interviews, explained that medium of instructional practice of teaching different strategies like using sign languages, examples, drawings, demonstrations, to complement what the language lacks. 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 main challenge the teachers faced is lack of subject related Sign language dictionaries for reference purposes to the subjects they teach. Also, there is no standardized sign language communication use in the schools. As the data obtained from the teacher respondents show that the big problem of the deaf education in our country is the lack of development of the EthSL. The teachers explained they were

thought sign language training by the old (outdated) book called “የሀ መጽሐፍ ”, which was limited to only 1009 words. This made teaching learning difficult. The Education and Training Policy (1994) did not give particular attention in regard to materials preparation and utilization to support special education.

Regarding limited sign language, the Alpha teacher informed as:

*Ok! Ethiopian sign language book “የሀ መጽሐፍ ”, which was limited to only 1009 sign words doesn't translate equally with the grammatical structure of Amharic language.*

Similarly a teacher informant from VICKtory strength the idea of limited sign language as followed:

*Ethiopian Sign Language and poorly equipped classrooms are among the obstacles to educating the Deaf with the required quality. Some teachers really tried to explain concepts in their own ways but this solution may t reduce or omit the content and concepts.*

According to the information gathered through interviews, the situation of deaf education in the deaf special schools is difficult due to poor facilities in most equipped classrooms and as the difficulty level of curriculum is increasing in instructional practice of primary grade level, so that the teachers may add or reduce information while they transfer to their deaf children, and even some times the deaf children cannot understand the content and concepts the regular teacher teaches in the classroom.

Despite the current distributions of school materials by the MOES, requirements of CWDs have not been supplied yet (HellenNajjingo, 2009). Additionally, VICKtory teachers also responded as, the preschools is providing sign language medium education and their students also brought a better improvement since they have started learning in the special schools.

Generally, regarding to the instructional practice for language and literacy development of early grade level, participants of deaf special schools of this research practice of sign language early grade level revealed that, all preschools are trying to provide appropriate instructional practice of language for deaf children. However, all interviewed special school principals responded as there is a gap in the practice of sign language early grade education. The principals were not confident to say that there is proper practice of

practice sign language for medium of instructional. The deaf special schools are not allocating important subject related sign language resources for the instructional practice of literacy development of early grade level.

### **4.3. Communication Approach of the Deaf in classroom Education**

#### **Setting**

Education of students in early classes requires skilled and thoughtful communication and support for effective sign language to develop students' language and communication skills; otherwise, it may contribute to lowered achievement, lack of communication or personal difficulties. Therefore, teachers of deaf students should have appropriate skills and knowledge of early grade level curriculum processed

As observed earlier in the findings, Sign language is primarily taught as a communication mode to practice the teaching of the Amharic language and other academic subjects. There is no attempt simultaneously to use signed and speech to teach the children about the rules of Sign language. The majority of the teachers interviewed revealed they use Sign language and Signed Amharic randomly.

Teachers were asked about communication experiences at early grade classroom approach for deaf students. Two teachers confirmed that to minimize the difficulties in the teaching of the Deaf early grade in the system, they use the teacher signs, home sign, Total Communication, picture, gesture, facial expressions approach. Three teachers didn't have a clear idea about the communication mode they are using,

Observation was made to see availability of textbook, learning/playing materials and Sign Language interpreter in the special deaf school. The researcher was eye witnessed for the shortage of textbook, SL interpreter & absence of learning/playing materials in a proper ways among the special deaf primary schools. However, there are different textbooks, sign language interpreters and playing materials in the primary deaf schools in limited amount.

The Alpha special deaf school principal responded regarding classroom communication

*For every lesson the teachers use a Total Communication and Amharic signed speech as a sole way of accommodation. This helps children*

*with hearing impairment to have a real message which is passing from teacher to the child. We are police or guide line in commutation approach.*

VICKtory special deaf school principal told to the researcher regarding teachers' accommodation of their lessons in the classroom playing/ learning process as,

*In this special deaf school the majority of teachers are deaf special need and they got short term training regarding to deaf education. This helped the teachers to communicate and support the children as much as possible even if it's not sufficient. Majority of teachers are not skilled in Sign Language, this creates communication barriers between teachers and children.*

Generally, it is possible to understand from the principal's response that the majority of early grade in deaf school teachers are not skilled in Sign Language, this creates communication barriers between teachers and deaf children. However, the sample teachers and the principals lack practicing of different ways of communication approach. They do not incorporate 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 in the classes under study as Total Communication.

One Alpha teacher also responded regarding to the teachers' ways of communication approach in the classrooms as follows:

*I mostly used body language, gesticulations which I thought was easy for the student to understand, without any trouble. I think that's the really very important thing to communicate in sign language and in written language as in spoken language, information is accessible for them only in sign language. What makes it differ is that teachers try to use the available communication mode practice of early classrooms.*

Another teacher from Alpha special school stressed about communication:

*I found that at beginning the children do not understand the lessons well because I use in the classrooms simultaneous communication and we communicate sign and speech but at times we have communication barriers.*

Another teacher from Alpha had this to said

*From my experience, it is not easy to communicate in abstract words; fail to connect the lesson, possible to teach the deaf without the aid of pictures. But if you use pictures, story lines and illustrations, they learn faster.*

It is possible to understand from the interviews that both special deaf schools for early classrooms t the teachers did not have appropriate information about different communication modes that can be used in classes where Deaf students dominated. None could differentiate Simulation Communication and Total Communication. They rather thought the two modes are one and the same. It is also found that they are not aware of the differences between using natural sign language, Manually Coded Amharic or Signing Exact Amharic.

According to researcher's classroom observations and in the teachers' interviews, the teachers were not practicing appropriate accommodation for deaf children that made the total communication mode in use Simulation Communication and total communication. Most participants indicated that the use of home sign was the only communication experience.

Another teacher from VICKtory teacher had this to say:

*When we meet these learners in school, we use simultaneous communication modes and sign language, finger spelling, lip-reading, home sign and pictures. To teach new vocabulary for teaching new Amharic words,we face difficulties because we are not using Sign language especially while we are signing some of the words when we are doing activity. It is difficult to interact by signing all children as they do not have experiences of intervention in schools.*

The teacher indicated that they use different kinds of their own ways of communication so called 'sign language' to interact deaf children but they do not know multi-sensory such as visual, kinesthetic, gesture, communications approach when teaching the deaf learners. As frequently observed in the classroom, there are 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.

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

Furthermore, teachers in their narratives indicated that classroom communication approach promotes the skills of language development, creativity as well as imagination. The approach also fosters self confidence in children.

One teacher from VICKtory said:

*I just find that the children are more involved and they are more engaged in the sign language, oral language is improving a lot, and they use those words in situations. I provide visual information and visual images for signs and objects but we don't have them in our schools. They communicate better and then they pick up learning better.*

As it is reflected in more than 8 formal classroom observations and in the teachers' interviews, there were not enough inputs that made the communication Approach. Majority of early grade class room communication interaction shows that gestural-verbal relationship by demonstrating the sign and having students repeat signing the word. After that, the teacher associates the gestural-verbal component with visual representation of the word.

There were no other communication modes, which are different forms of simulation communication. Only in three sessions, there were attempts to incorporate different communication Approach to provide preferences for different pictorial teaching aids.

Experiences in different Approaches 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.

#### **4.4. Facilities and Resources**

##### **4.4.1. Materials in the practice**

The responses from participants revealed that the teaching equipment and materials have influence in the practice of Sign language on deaf learners. Findings from interviews and observation justified that the influence of the equipment was great but they were unavailable in schools. However, the findings from observation of classrooms indicated that the contents were not related to the teaching and development of Sign language to deaf students.

Alpha School teacher said the following:

*For me I think language is natural to children. The visual teaching equipment complements the teacher's effort in teaching Sign language. I believe it is the way children learn. Unfortunately, we have nothing for visual teaching of Sign language, except a sign language book for training. Visual materials facilitate easy development of the language by simplifying certain concepts in visual form. Surely, the teaching materials have great influence in the acquisition of Sign language but we are failing to provide our schools.*

Furthermore, teachers in their narratives indicated that *materials* approach promotes the skills of communication and language development, creativity as well as imagination.

Alpha School teachers added the following:

*I just find that the children are more involved and they pick up more on the oral language, oral language is improving a lot, and they use those words in situations. Teaching and learning teaching materials provide visual information and visual images for signs and objects but we don't have them in our schools.*

Most of the responses from the participants revealed the significance of the materials in a particular way in the acquisition of Sign language for deaf learners despite that they were

inaccessible in most deaf schools. On another note, the findings indicated that teaching materials have influence in smooth communication if they are available. The participants agreed with visual pictorial learning aids; learners could acquire the information and respond easily.

Another teacher from Alpha teacher added the following:

*The teaching materials enable students to have access to instructions and to participate in the academic and co-curricular activities without straining myself as a teacher. Unfortunately, we don't have any equipment. Sometimes, I use visual materials learners get motivated also assist by promoting the development of appropriate social skills, but we don't have appropriate pictorial learning aids to acquire correct Signs to smooth interaction for pedagogy.*

From the above narrations, we can see that having smooth interaction through teaching / learning materials in the pedagogy of Sign language, promotes self-identity and puts deaf children in language rich environment. The informants agreed that pictorial teaching aids help the learners to access information. Different ways in which the equipment assists deaf learners are important to empower the language and make it an effective tool as a medium of instruction.

The principals of both VICKtory and Alpha schools were asked if the facilities and equipment they have meet the requirement of deaf students, they stated that:

*Visual teaching aids help learners with hearing impairment to access the language through sight without forcing the learner. We normally use the deferent subject teachers made teaching materials that are found within our school. But these teachers made teaching materials are some times less attractive to deaf child seven though we still use. Early Deaf student need to have good and big pictures books, audio and video teaching aids, and much variety of toy stop lay with. The nice teaching materials are very expensive to buy.*

*(VICKtory principal)*

*This is a challenge for me because I want to use modern teaching materials such as projectors, TV, and audio. Most of the time I use local made teaching materials, which sometimes do not attract my students. We do not get any budget from the Government to buy teaching materials, thus the only way to support my pupils is to use the local teaching*

*materials found in our area.*  
(Alpha School principal)

In the observed classes, there were also lacks 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 word sign pictorial learning aids and the teachers' drawings on the blackboard, there were no visual materials for Deaf students.

It was evident that schools do not have sufficient facilities and resources which provide deaf students with full opportunities to exercise their skills and learning activities as well as communicating with other students. Hence, there was no accessibility to more visual teaching materials, interactive whiteboards, computer video materials, real objects were make it an effective tool for deaf students to develop language.

Also, the significance of visual materials is to influence access to visual instructions without forcing deaf learners to respond to oral instructions.

Another teacher observed had this to say:

*I find difficulties when I teach reading and writing without pictures. If you teach without pictures, children will just be looking at you, they will ask questions that are confusing and out of context. So what I do is to draw pictures on the board or Manila paper showing the scenario of the material I am teaching, I think visual teaching and learning aids are the key resource material in the development of any languages even in the acquisition of Sign language but it is not available, communicate through pointing at relevant objects that represent concepts..*

It was observed in the early grade level classes some students did not have text books for practicing reading. The teachers relied on board work for teaching. Additionally, classes lacked picture books and wall charts. The reading sign books available were learner centered, requiring independence of learners. However, hearing impaired learners require constant interaction with their teachers. This means that they if books designed to meet their needs are not there, learning becomes hard. The interviewed teachers above indicate that deaf learners require the use of concrete teaching aids as opposed to presenting work in abstract. Most participants expressed their interests in visual materials and equipment that facilitate reciprocal communication with visual learners when teaching Sign language.

Another observed teacher had this to say:

*From my experience, it is not possible to teach the deaf without the aid of pictures. If you present your work in abstract, learners fail to connect the lesson. But if you use picture story lines and illustrations, they learn faster.*

It was also observed that teachers did not use concrete objects to aid their teaching. Instead, most of the teachings conducted were in abstract. This made early grade teaching hard. The visual materials have influence, since they allow the learner to access the language through the eye. Nevertheless, some of the displayed material had clearly been up for a long time and needed to be replaced or removed.

Furthermore, the most common source of learning material on classroom walls was hand-made by teacher. A problem with this is that teachers sometimes spelt words incorrectly or provided incorrect or inaccurate information or material. For example, in one class, the teacher had drawn a part of the body 'free-hand' rather than by tracing it.

The above responses clearly illustrate the issue of insufficient facilities within deaf schools. It is unfortunate that the Ministry of Education policy to those principals and teachers but do not dedicate sufficient to the resources for the students.

There was very little evidence of material on display or of posters that accompany sign words. Less than half of the classes had any examples of teachers and learners' own work on display. There were classrooms where few print collections of pictures, consisted of picture letters of the alphabet, words matched to pictures and in numbers of sign language. Nonetheless, there is clearly a need for more mother-tongue and language material with appropriate engaging education. The limited access to relevant visual equipment and materials experienced as a challenge for using sign language and one of the factors affecting acquisition of Sign language for deaf students.

#### **4.4.2. Classroom Environment Situation**

According to the interviewed teachers, all of them provided setting arrangement for deaf students in the classroom. Teachers considered beneficial for both, selves and deaf students to place latter at the front desks. However, in at least 50 % of the 6 classrooms

observed, physical conditions were less than adequate. In some cases, the rooms were too small to accommodate the class. The researcher also involved classroom observation for further understanding while lessons were running in three subjects in both Amharic and sign language classes in grade 1 and 2 for 30–40 minutes. That is 2 periods in each school were observed. During this time, the researcher has observed different points by using an observation checklist that was produced for this purpose. The researcher's focus was the teacher and students' ratio because it's the basic thing to quality education. The student number, the class size and teacher ratio is not well matched.

Regarding the class environment a teacher from Alpha stated:

*We have few desks, blackboards are bad, the windows are wide open without any noise protection, and we do not have ceiling boards meaning when the sun is hot, it is difficult for the students and for the teachers also.*

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.

Regarding the classroom environment principal of Alpha primary special school said:

*Look, we only have one classroom to use and it is a small room. It is not easy for children to move around freely. Tell me how can I divide my students in this class? We cannot even have role play in this class, it is very small. Ordinary classes do not have this problem. Deaf children need to have good class rooms that are big enough for them to move around while doing various activities.*

One school teacher from Alpha blamed the corrupt system of the country. She strongly complained that this would not be a big problem if the people concerned in the system could be held responsible to maintain the class room environments for children with deaf.

This was justified by the principal of Alpha primary special school while we had interview sessions:

*Our school was one of the first special deaf schools. It was established some 48 years ago. Government has not done much for deaf children compared to the hearing social classes. The class rooms are very small,*

*have no space to move around. With such a small classroom, some activities are limited, for example role-plays.*

It was observed that a classroom situation of Alpha special primary deaf school is not good. The desks, windows, the floor, and black boards are not good a tall. The whole classroom environment is not good for the teaching and learning process, especially teaching children with such special needs. The observed 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.

Furthermore, principal of Alpha primary special school added this:

*If you do not have proper teaching classrooms, the teaching and learning is very difficult. The room does not have ceiling boards, children do not have enough desks, some sit down, the windows are wide open without any sound proofing, and there are no picture drawings on the wall for learning purposes. However, the learning environment does not attract a student's attention to learn properly these types of environments are not even good for a teacher to promote the teaching and learning process, deaf learners with special education needs need a class where they can feel safe and happy*

As it was observed, the rooms were uncomfortable to follow up 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.

#### **4.5. Challenges Related to Sign Language skilled teachers**

The findings of the study revealed that most teachers teaching deaf learners did not have adequate sign language skills. The study showed that a good number of teachers were not trained in special education, and were not competent enough to teach deaf children as they did not have the necessary training and qualification to teach deaf learners. The

teachers were able to see how being exposed to Sign Language would help them to learn the language. They linked the skills that they were currently teaching at school. When asked about how being in this school would affect their sign language skills, two teachers stated that:

*Well qualified SNE at colleges and Sign language is given very little attention by such high learning institutions. The education policy should be adjusted to accommodate of teacher trainers at higher learning institutions that with special education programs*

Another Alpha school teacher

*I didn't know how to sign the language when I first went to this school but by watching them, I could understand some of the signs. Teachers with basic skills in Sign language are very few if not none. Sometimes we fail to communicate with these pupils. The policy should enforce teacher preparation for Sign language pedagogy; the language policy has negative effect on language acquisition because nothing had been done in terms of human and material resources to affect the acquisition of the language.*

Two teachers were able to sign language by informal way; they were learning at school after getting job without formal training. Sign language is a fully fledged language with its own vocabulary, syntax and grammar. It is the only form of communication for the Deaf.

Alpha school principals said this regarding sign language skill of teachers:

*Most of the teachers know very little Sign language when they started teaching the Deaf. They explained various means by which they learnt their Sign language. We need time to training to understand language structures of Sign language the way they use spoken language.. Yes, we know that the native Sign language is vital for deaf learners because it is their mother language but our teachers were not equipped with Sign language skills.*

However, as it has been noted above, the institutions that train teachers of the Deaf do not include Sign language as a major component of the curriculum. Hence, it can be assumed that upon graduation such trainees may not be well equipped to teach Deaf students through their language, Sign language. In most instances Sign language is treated as a component of special education and not as a language in its own right as seen from the

nature of training in institutions of higher learning. The teachers were qualified in teaching deaf 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. There were no training courses related to sign language and deaf education, as school principal noted.

Regarding to the training courses VICKtory school principal asserted that:

*Me as a school principal, have not been involved in any teaching training courses to deal with managing school, but I have short term training related to sign language deaf education.*

Alpha school principals asserted that:

*'Sorry, when I started my job in this school, I have not seen such practice or training related to sign language education.., I have no idea of how to deal with students of special needs, in particular deaf students..., I did look for a course,*

A teacher from Alpha said,

*Teaching the Deaf and using sign language as a language, 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.*

Both schools principals reflected that for all teachers under study, in-service and pre-service is needed preparation when they started teaching Deaf students. However, the data gathered through classroom observations showed that only three of the deaf teachers have enough vocabulary of EthSL to use it in combination with the lip reading, regardless of the failure in the system of Signed Amharic.

Additionally, Vicktory school principal said that the school's pre- and in- service EthSL training for teachers could contribute to the improvement of using sign language. 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.

The informants reported that regarding the education of the deaf the main challenges of teaching deaf students in the early grade was the absence of lack of resources, facilities, materials and teaching aids. The interviewed teachers and principals have indicated that there is one NGO which has been involved concerning teachers and deaf students' sign language training.

Most teachers interviewed confirmed that they did not have training in special education. Most of them said they have learnt most of the skills of signing from learners. Lack of teacher qualification in Special Education and poor skills in sign language have been found to be responsible for low literacy achievement among deaf learners.

The findings are in agreement with Kalabula, (2007) who stated that teacher's competence levels in sign language and their training in special education is of great help to the acquisition of sign language on the part of deaf learners. This is to say without training in special education, and without teachers adequate skills in sign language, deaf learners will continue to lag behind in reading and writing. The success of children in school can only be achievable if teachers are well qualified to teach. However, since most teachers of the deaf were found to be less qualified, it should not be surprising that deaf children are still achieving low in reading and writing.

#### **4.6. Difficulties in Teaching Practice of Reading/ Writing**

Engaging in spoken language processes such as problem solving, developing sign language and reasoning and communicating reading and writing language depends upon children having good communication skills. It is crucial therefore that the learning environment allows for ease of communication. In the interviews a number of teachers expressed uncertainty about how to approach the teaching of reading and writing and what strategies to use for teaching Amharic language structure.

Regarding to reading and writing teachers noted that,

*Without basic understanding of nouns, verb, suffix, prefix etc 'deaf children lack literacy learning skills', 'can't read, write and listen'; 'lack*

*concentration'; 'forget easily'; 'are irresponsible'; 'do not grasp quickly'; and 'take too long to write even a short activity'.*

Another teacher stated about that for children learning the language of reading:

*In the early days of vocabulary development it was important that the words selected help understanding rather than present a new item to be learnt. It was realized that if base words could be built upon to form vocabulary for more complex terms, then mathematics learning could go hand-in-hand with vocabulary learning.*

The other respondent had this to say:

*It is difficult to teach reading to deaf learners because there is no definite sign for a any given word, one sign may refer to many other different things, or the same word may be signed in many other different ways depending on the location. Therefore, we spend a lot of time finger spelling particular words. This makes it difficult for hearing impaired learners to learn to read.*

The other respondent had this to say:

*I find it difficult to teach reading to hearing impaired learners because I am not trained in special education. I have inadequate sign language skills, so I learn most of the things from the children.*

The data revealed that all teachers felt that practice of deaf children are not cognitively different from their hearing peers and Meadow-Orlans (1980) indicates that there is evidence to suggest that deaf children learn concepts in the same sequence and in the same manner as hearing children do. However Flexer (1999) suggests that deaf, whether slight or profound in nature, if unmanaged, can have a negative impact on the development of not only spoken language but also academic competencies.

One other teacher noted:

*The writing skills of hearing impaired learners are generally bad. They only depend on copying the teacher's black board work. They find it difficult even to construct simple sentences.*

One teacher noted:

*Deaf students' overall learning, including reading and writing, is generally delayed because of a limited language base. Others assumed that the 'problem' lay mostly in deficits in the learners themselves. For example, 'do not understand sounds and vowels; 'are unable to combine vowels and consonants when reading 'can't hear sounds properly, 'don't understand how same sounds are pronounced in different words, even though they look the same'; 'have poor pronunciation'; 'take time to pronounce words' 'cannot differentiate between sounds such as ሰዎ and ሰዎች in words'; 'don't know sound letter relationships'; 'write what they hear' phonetically; 'cannot differentiate between ደ ጅ, or ጠ ጩ ሐ, ሀ ሰ ሰ፣ reverse letters – write ቡ instead of ቢ, ሀ instead of ሐ instead of ሐ'; 'write letters upside down'; and 'do not leave spaces between words'*

Three Amharic teachers felt that when pronounce words' concepts are taught 'visually'. They are easier for deaf students to understand. One believed that signing children, being visually oriented, are perhaps more likely to find it easier to adapt to the written form of a number than a hearing child because they are more focused on visual things. I observed that the children were more likely to attempt, and in due course understand, a phonetically problem when they used hands-on, visually engaging reading write letters activities and resources.

This and other data suggest that teachers do not sufficiently realize that, if learners are coming into their classes with little prior understanding of concepts related to print awareness, letter knowledge and the purpose of reading, then their literacy programmers need to be designed to 'close these gaps' by including such foundational reading and writing skills. Indeed correlation studies have identified phoneme awareness and letter knowledge as the two best predictors of how well children will learn to read during their first two years in school.

The other respondent had this to say:

*It is difficult to teach reading to deaf learners because there is no definite sign for a any given word, one sign may refer to many other different things, or the same word may be signed in many other different ways depending on the location. Therefore, we spend a lot of time finger spelling particular words. This makes it difficult for*

*hearing impaired learners to learn to read. However, I am not trained in special education. I have inadequate sign language skills, so I learn most of the things from the children.*

The teacher indicates that connection between letters of the alphabet signs and Amharic to help students understand that written uses letters of the alphabet symbols to express ideas and concepts in similar ways that signs represented ideas manually.

One teacher respondent said,

*Deaf learners are very good at associating letters of the alphabet with hand shapes. The problem they have is not with letters of the alphabet, but with vocabulary of signs and use of traditional sign language, Also not effective Sign Language use in deaf Schools because sign vocabulary differs from one country to the other. Unless Amharic Language is first transformed to the language known, Sign Language, it will continue being ineffective.*

The other issue raised by teachers during interview was the poor foundation of early grade deaf students in reading and writing due to inadequate early childhood education facilities for deaf learners. Most teachers complained that a good number of deaf children entering school have poor language and literacy background. As they move up the education ladder, they fail to catch up with the challenges of education and hence they have continued to score poorly in reading.

Regarding to writing skills of deaf learners, teachers responded as follow:

*Reading skills of deaf students are so bad that one can hardly comprehend. They read slowly, word for word, thereby distorting the sentence structure and meaning. The deaf are affected primarily by English grammar due to the fact that they have problems with phonetics, hence incapable of dealing with reading. The writing skills of deaf learners are generally bad. They only depend on copying the teachers black board work. Deaf find it difficult even to construct simple sentences.*

One teacher said that:

*Deaf special schools have no Early Childhood Education Centers where deaf learners can acquire pre-school education before they enter grade one (1). The government has not invested in this area, so the deaf have continued to lag behind in reading and writing due to poor educational background.*

Learners are not doing enough writing and reading in the spoken language, the first additional language, or other subjects/ learning areas. I found very limited literacy opportunities and learning experiences for learners in most of the classes observed and this makes it unrealistic to expect learners to cope with the academic and linguistic demands of the curriculum from Grade 2 onwards. They also would not have acquired sufficient reading and understanding of Amharic to understand the content of the curriculum; this should be transmitted through Amharic and other language.

The observation conducted revealed that lack of visual reading materials has made teachers to use reading books that are not appropriate for deaf learners. Deaf learners are made to read books designed for hearing children, books with uncontrolled and difficult grammar which makes it hard for deaf children to comprehend. This has contributed to low literacy achievement levels among learners with deaf.

Teachers were asked to state the availability of books that support writing of deaf learners in the school. They responded as:

*...the only reading books available are those designed to hearing learners. Books designed for hearing learners do not motivate deaf learners to read because they do not have the much needed pictorial illustrations. Personally, I have never seen books designed for deaf learners.(a teacher from Alpha)*

Another VICKtory Amharic teacher had this to say:

*I find difficulties when I teach reading and writing without pictures. If you teach without pictures, pupils will just be looking at you, they will ask questions that are confusing and out of context. So what I do is to draw pictures on the board or Manila paper showing the scenario of the material I am teaching.*

Confirmed that pupils' books designed for the deaf students were available in the school, while nine all of respondents said their schools did not have reading deaf students books designed for the deaf student.

Another challenge of teaching and learning of meaning was connected with explaining new Amharic sentences. According to a teacher of VICKtory School, Amharic language has different meaning, which is not complicated to understand even for deaf students. According to Amharic teachers, their deaf students often only visually memorized some written word in Amharic, without their comprehension. In contrast to other participants, two teachers stated that Amharic vocabulary they teach, action verbs, is very close to everyday life and more or less familiar to everyone, thus her deaf students did not have problem to understand terms.

One respondent said,

*Reading skills of hearing impaired learners are so bad that one can hardly comprehend. They read slowly, word for word, thereby distorting the sentence structure and meaning. The deaf are affected primarily by Amharic grammar due to the fact that they have problems with phonetics, hence incapable of dealing with reading.*

Generally, my observations revealed that when teaching sign vocabulary thinking, for example sorting pictures of clothing, food and animals into categories, the children did not understand what was being asked of them. They followed the direction of the teacher's eyes in order to correctly categorize their pictures, or required a lengthy and repeated explanation from the teacher before they began to grasp the concept. In this regard, Carrington (1999:20) believed that teachers should have an instructional effectiveness for educational change and school improvement. Teachers' instructional effectiveness plays a significant role in knowledge, and has strong relationship with student achievement (Henson, 2001). Further, he discussed that teacher instructional effectiveness can assist a teacher in many meaningful educational outcomes.

#### **4.7. Challenges Parents' of Deaf children Faced**

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'

education. As teachers mentioned, many parents didn't provide enough support for their child to use the language at home.

Parents were also asked about some of the challenges they were facing in the education of their children. Some parents spoke about the medical expenses they have to incur.

As a parent from Alpha school said,

*Communication with her has been very difficult. I have been using home signs with her since she was five. Sometimes she checks on my lips when I am talking.*

*Another parent also expressed worry and concern for the child when she progresses to higher grades as follows:*

*That is creating a least restrictive environment as well as triggering the innate mechanism of educational needy children. We all family have skill gaps particularly Sign Language skills.*

Since parents are involved in the development of Sign language, there is a need to acquire Sign language in order to alleviate these learners from poor Sign language acquisition, hence promoting social participation. From the participants two trained parents responded as:

*When I brought my child in the first time to the school, the school principal and teachers have positive approach to our children and the school was accepting our child with warm welcomed, but we cannot have competency in the training of Sign language. I am always confused when to communicate with my son go back home after school. We all parents should acquire formal Sign language because they spend most of the time with these children. It is difficult to de-teach informal sign language that would have been acquired at home.*

The responses reveal that parents are crucial contributors in the practice of teacher pedagogy on acquisition of Sign language by deaf learner's special schools. Parents are among other family who should be given first priority to acquire native Sign language for effective collaboration in the teaching of Sign language to deaf learners.

Another parent expressed his idea as follow:

*Deaf parents need to acquire Sign language to reduce confusion in the management of the child communication. In order to have language development as parents, family members should be able to communicate with their children using Sign language because these learners need to participate in family matters, community activities as well as in family issues like any other people.*

During observation time trained parents and their deaf child communication at school .They tried to use the Amharic language but ended up using either sign communication or some home signs. As it is observed they could not effectively communicate with each other. Parents noted they used home sign language such as pointing and gestures, as well as lip reading. Similarly, some parents noted that apart from using the local signs, they also continued with speech to an extent that the children could pronounce some words.

*A parent explained his idea concerning his child's relation with his family members as:*

*Our child seems to have a nice time playing with his family. We understand that our child will not be like other hearing children and so he will need our assistance for the rest of his life .We are glad that the school has made him friendlier than before. All the three years he has been at school, he has not learned to write or read but we are happy that he learn sign language and shares a social life with friends at school. For us the most important thing is that our boy is able to meet other children and enjoy himself.*

On the other hand, all parent respondents admitted that there is Sign Language skill gap.

Regarding this, one parent said this:

*I did not take sign Language training, because I am coming from 'sendaf', long distance away from VICKtory. There is also transportation problem. I bring my child to school early in the morning and go to work and then come back again to the school to take him home. This brought serious challenge on our daily life as this take our time and resources..*

The school principal also witnessed that most of the parents come from long distances. Thus, children and parents are responsible to travel such distance and this is also

challenging for parents. Parents admitted that having a child with a deaf is a big challenge especially if one is a single parent.

One parent said she is happy that her child is attending school and this gives her room to focus on her work. She also views the school as a good place for her child because he is learning a lot compared to when he was just home with her.

In general, as one can understand from the above interviews, most of the parents confirmed that it was difficult to help their hearing impaired children in the home because of communication problems. One reason cited for poor communication between the deaf students and their parents is inadequate skills in sign language on the part of parents.

## **CHAPTER FIVE**

### **DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

The current study aims to understand the teaching and learning process of deaf students in two deaf school education setting, which is an innovative practice deaf primary in Addis Ababa. To achieve the overall aim of the study, qualitative semi-structured interviews and observation have been conducted with the language teachers and deaf learners.

#### **5.2. Instructional Practice, a Learning Approach and Its Importance**

The study has revealed that there are difficulties faced by teachers when teaching Deaf children. At lower primary level, children find it very difficult to understand instructions by their teachers. In most cases teachers have to repeat themselves at least twice for the instructions to be understood. Personal observations by the researcher revealed that the two schools did not have enough Sign language materials.

At both schools investigations revealed that only the language work book for deaf children for grades one to two and the Ethiopian sign language book were available. Only the Sign Language book and the Sign language teacher's guide were found. Moreover, the teacher's guide had no supporting deaf book.

The principals also tried to explain the process they were passing through to instructional practice for Language and literacy development. However, the data from classroom observations showed that only two teachers have enough vocabulary of Signed Amharic. All teachers complained that the Sign Language book had some signs that were different from what the pupils were actually using. A perusal of the dictionary revealed that words like "word" and "about" are signed differently from the way students sign them.

Besides, the dictionary does not mention the existence of another sign in other deaf communities elsewhere. Below is an illustration of the differences between some of the words found in the Sign language dictionary and what the pupils actually sign. The main challenge faced by teachers is lack of subject related Sign language dictionaries for

reference purposes to the subjects they teach. Also, there is no standardized Sign language use in the schools. Schools have their own Sign language.

One of the standards officers bemoaned the lack of Sign language materials and scanty teachers' and pupil's text books and failure to adopt the Ethiopia Sign language as some of the curriculum challenges faced by teachers when teaching Deaf students.

Even without any previous knowledge and experience in deaf students' teaching, the participants can anticipate some potential challenges of the proposed practice such as the troubles with transferring theoretical information, communication and interaction difficulties. In this respect, teacher response on his tension is remarkable. Making hearing peers familiar with the hearing loss and its effects could support peer relations and create better learning conditions; besides, the emphasis on the similarities between deaf and hearing students and not only on the differences stressed by teacher is valuable (Antia et al., 2002, pp. 219, 222).

To establish a direct interaction despite the differences in the communication modes, the deaf learners and teachers usually alter their own communication style or refer to the partner's mode. Body language/gesticulations and the basic signs are the most often applied ones during the direct communication between the teachers and 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 Amharic language. As a result, as some of the teachers did, they might shift or tend to use spoken languages to clarify things.

### **5.3. Communication Approach of the Deaf in classroom Education**

#### **Setting**

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 Simulation 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

Simulation Communication. 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.

According to the results of the study, the use of home sign system has a relevant influence on the development of sign language competence. Even though the home sign systems are not primer languages, it is well known that these code systems already contain the bases of sign language structure, what Goldin-Meadow (2002) calls the resilient attributes of the languages. The building up and usage of these basic structures naturally facilitated the acquisition and use of the conventional sign language system, the other factor that was found to be responsible for low achievement in sign language sign language code system.

Teachers complained that the teachers in grade one and two, 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 10% 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, total communication there were not enough components practically in the classes which means that standard total communication was not in use. Though Total Communication 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.

The researcher also carried classroom observation on the use and teaching of Sign language. In both schools, it appeared that Sign language was time tabled at least up to Grade one. There appears to be some serious teaching of Sign vocabulary but beyond that, there is no Sign language. Though the teachers did not consider Simulation Communication and Total communication as two distinctive styles, their practices in the classes share many of the features of Simulation Communication. Hence, they tried to practice 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.

Those Deaf children have start learning their first language (EthSL) in their early childhood. They enjoy watching signing when listening to the story. To be able to fully consider the deaf child, one must first see that Sign Language is more than just a way to substitute oral communication. As Meadow (1968) explained, with the acquisition of a sign language, it will be possible to build the mental language that is indispensable for successful second language learning in school. Deaf parents are followed by children of hearing parents, who are characterized with the Amharic language dominant for acquiring sign language is more difficult for them because of the lack of the early language acquisition. The early deaf child in my research was repeatedly exposed daily to their mode of communication which was Ethiopia Sign Language.

#### **5.4.Challenges Related to Teaching skill of Sign Language**

Study unfortunately suggests that principals are not actively concerned enough to seek training or adequately informed about deaf education to the extent that they appear not to understand that they are currently not meeting the needs of deaf students. Pre-service teachers are not well-prepared to teach reading and writing at all levels of the education system. During the data-collection sessions undertaken in both the teacher-training programmers and in the schools, teachers told us they were not trained as sign language specialists.

The school principals seem to have a lack of awareness and understanding of their roles and responsibilities. Additionally principals could empower teachers to ‘create collaborative learning cultures’ (King, 2011: 153) between principals and teachers and between teachers themselves for enhancing deaf students’ learning. It is the responsibility of leadership to ‘create the organizational capacity for change’ by providing time for collaboration (King, 2011: 152). It is unfortunate that such collaboration does not seem to take place within the schools that I visited. The cause of this seems to be a lack of understanding of the concept of leadership on the principals’ side.

Durtschi’s (2005) findings supported my interpretation supported my interpretation regarding the role of principals in revealing that the objectives of inclusive education in

elementary schools were accomplished when principals offered complete support and facilitated training courses for school staff. The findings also revealed that the practice of sign language was due to principals attaining knowledge and experience about sign language needs and deaf education. the quality of teachers posted to these institutions for the deaf is below par. Most are professional teachers, but they lack the linguistic knowhow to use EthSL to impart knowledge to the deaf. According to Okombo ([1992], p. 21):

The lack of ongoing professional development described by teachers is a problem that needs addressing in its own right. Siegel and Jausovec (1994) found that training was highlighted as an effective way of improving teachers' practices of deaf education. According to Marchesi (1998) professional training of teachers was one of the key factors to successful deaf education.

In a similar study, as the schools principals indicated the schools 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 and deaf education. 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, the other training provided by the school is new coming parents and new deaf child learn sign language training. Bothe School principals interviews confirmed 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 challenges, on the other hand, are things that should be improved for better educational communication with sign language users and their educational benefits.

### **5.5. Challenges, Resources and Possibilities of Teaching and Learning**

The challenge of lack of visual aids that support writing reported by the most participants are caused by different factors, some of which are related to deaf participants' limited language, reading and writing competences. Similar difficulties encountered by deaf learners are described in the research literature (Foster, 1999, Lederberg & Spencer, 2001, Richardson, et al., 2010, Knoors&Hermans 2010). 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 teachers reported it happened in their cases infrequently.

This could have an effect of obstructing communication, since the students might not be 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. I requested to the teachers Seating arrangements 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.

However, organize classrooms with resources to meet the needs of deaf students. Moreover, according to the view of the social model the problems facing deaf students should be sorted out within the educational environment (Villa and Thousand, 2005).

These are many challenges that deaf and hard-of-hearing students face in the classroom, and we hope it helps open conversations in your school and district about taking a few additional steps to assist deaf students in the classroom. By acknowledging the challenges deaf students are facing and implementing strategies to alleviate those learning barriers, teachers create a learning environment that will benefit all students every day.

A classroom observation indicated that most classrooms for deaf learners did not have visual materials that support writing, such as picture illustrations books, wall charts, and concrete learning aids. Lack of visual materials such as books, charts, pictures and illustrations make it difficult for teachers of deaf pupils to teach well. Since most teachers complained that they found trouble in teaching writing to hearing impaired learners due to lack of teaching materials, the problem of low writing achievement has continued to persist. Strickland & Strickland (2002) states that learners acquire literacy simultaneously in environments that permit them to read, write, listen and speak for a variety of authentic purposes. This assertion is contrary to the findings of the study. The study indicates that the environments in which deaf children are exposed to do not permit them to learn to write. Such environments lack authentic texts which are useful in helping the deaf to comprehend and make meaning from texts.

## **5.6. Challenges of Teaching Reading/ Writing Amharic Language**

The finding by Schick and et al. revealed that a limited time to adapt reading texts and generally, the lack of proper reading and other adapted visual materials for deaf learners create an additional challenge for teaching and learning theoretical part of the program.

The teaching of Amharic word order might be confusing to the Deaf who may have challenges coping with a linear language when they are predisposed to a visual language. According to a teacher of Alpha school, the situation is comparable to teaching an American child English using Amharic word order. For example if an American boy is taught to say the Amharic sentence "ዳቦውን ለሰው የውሰጠው," in that order but using English words, it would come out like "He gave the man?" Now to a native English speaker, this does not sound like English.

This shows that a combination of signs in any other word order different from the Sign language word order (grammar) is not Sign language and may be confusing to the Deaf pupils. Sign language has its own grammar.

As observed earlier in the findings, Sign language is primarily taught as a communication mode to facilitate the teaching of the Amharic language and other academic subjects. There is no attempt whatsoever to teach the children about the rules of Sign language. They learn about grammar and the differences between the two languages. Like in other hearing schools children child in deaf special schools must know both languages.

Writing is one of the skills which deaf learners can rely on in their quest to communicate with non-deaf individuals who may not know sign language, and have to depend on reading and writing to communicate. Therefore, teaching writing to deaf learners becomes important. However, not much emphasis has been placed to the teaching of writing to deaf learners as evidenced by this study. Deaf learners have continued to lag behind in writing due to non-availability of support materials that can aid them to learn to write.

They must know how concepts of tense, pronouns, plurals verbs are used in each language. These concepts may be compared between the two languages. In fact once these children become fluent in their mother tongue, Sign language, they will have points of references as they learn their second language Amharic or other language. They need to know the rules of the first language, that is to say, the grammar and syntax of their language before being exposed to the rules of the Amharic language.

Another challenge worth attention is a deaf learner's restricted participation in the classroom discussions and conversations, mentioned by Tcr,6 and many times stressed by different investigators (Foster, et al., 1999, Lang, 2002, Cawthon, 2001, Knoors&Hermans, 2010 & Powell et al., 2013).

Classroom discussions/conversations can be seen as social situations enabling sharing of ideas and promoting new understandings as the knowledge is "co- constructed" through the social interaction with others (Cole, 1996, Vygotsky, 1978). As a teacher is not the only source of knowledge, the deaf learner's limited access to peers' questions, replies and comments restricts learning opportunities.

The challenge with division of attention among students stated by the teachers demonstrates the tension between the implicit rule requiring from a teacher to pay attention to all students and the new demand requiring the provision of extra support to deaf learner. However, there are also specific needs **stated by the deaf learners but not perceived as such by the teachers as it is with written exams, creating a serious challenge for the deaf learners.**

Besides, even though the teachers recognize the deaf learners' difficulties of language comprehension, reading and writing, it seems that they underestimate the deaf learners' difficulties. High expectations towards deaf learners and the need to challenge them is considered essential (Borgna et al., 2010, Marschark, 2011), however, these challenges need to be manageable and within the zone of learners' proximal development (Vygotsky, 1978, Rogoff, 1990).

Restriction in sign-language related to reading and writing, caused by the Amharic vocabulary unfamiliarity with a particular spoken language related subject, in some cases doubles the challenge related with the teaching theory. The negative impact of the interpreter's limited subject content transmission was reported by Long and Snell (1999), Powel et al. (2013).

### **5.7. Challenges Faced by Parents' of Deaf Children**

Next, the study established that most parents and other family members of deaf children did not engage their deaf children in reading activities at home. Firstly, parents confirmed that it was difficult to help their hearing impaired children in the home because of communication problems. One reason cited for poor communication between the deaf learners and their parents is inadequate skills in sign language on the part of parents. Secondly, one parent complained that it is difficult to read with their hearing impaired learners because the school did not provide reading materials to the hearing impaired learners to read at home. These factors have contributed to poor language education achievement of children.

As most 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. The home environment plays a major role in helping learners improve their reading skills. Pupils' reading at home with their parents or other members of the family is a critical ingredient to helping children learn to read.

Parental monitoring of homework, the presence of reading materials in the home, and parental limiting of access to television may all have a positive effect on reading achievement. Taylor, (1983) writing about the importance of parental interaction in the home stated that the first stage in becoming a reader begins as soon as the child is exposed to and becomes aware of books and other artifacts of a literate position in the home. Therefore, lack of parental involvement in reading activities of deaf children, and non exposure of deaf children to reading books in the home have been found to have contributed to low literacy achievement among learners with hearing impairment.

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.

## **5.8. Summary of the Research**

The study aims to examine the practice of sign language use in classrooms. It is useful to have a look at the lack of professional training, communication approach, the purposes the deaf education served, the role of sign language of the medium, facility classroom arrangements, materials available, and challenge of the sign language users. Thus the research examined these topics and arrived at the following conclusions.

The media of instruction included sign language, simultaneous communication, sign exact Amharic, and Total communication. It was concluded that there was no uniformity of the medium of instruction. From the summary of the findings, I propose a practice to solve the problem of Sign language acquisition for deaf learners in regular primary schools. From the findings of the study, Sign language teaching system was seen to be barred by the incompetence of trainers in colleges, teachers in schools, parents and service providers in the community.

On a more specific note, the challenge was viewed from top down in a deaf education system. The diagram below illustrates an incorporative model in a top-down approach that could solve the problem of poor Sign language acquisition. Design a curriculum for Sign language and relevant equipment outlined as well as in-service training of lecturers. The curriculum is exposed to teachers in colleges and in universities by expert lecturers.

This seems to be due to the fact that the training institutions take the medical model where Sign language is not considered as a fully-fledged language for the Deaf but simply as a remedial measure of communicating with the Deaf. On the question of how Sign language is used, the study established that Sign vocabulary is taught in the primary grades. The study also established that teachers use a mixture of Sign language and Signed English interchangeably in these schools. Although teachers have good reasons for mixing the signing systems, it may be detrimental to the language development of the Deaf especially if competence has not been developed in any language.

With respect to the challenges which teachers face in deaf education, the study has found that because of lack of adequate Sign language training of the teachers of the Deaf; there are some challenges which the teachers face in teaching the deaf. These challenges include signing words wrongly at times and the notion that Sign language is a shallow language. The question of inadequate training has also led to some pupils blaming the teachers especially the hearing teachers saying that they do not teach them in Sign language which they understand as seen by their overwhelming preference of deaf teachers to hearing ones. There is also a challenge of lack of resources for Sign language as only one Sign language book and the Sign language dictionary were found being used by teachers.

As regards the coping strategies, teachers simply learn Sign language from the pupils themselves. They also rely a lot on the chalk board and pointing. Where they come across new signs which are unknown to both the teacher and the pupils, they simply create new signs. However, the challenge is that the newly created signs will only be known to that particular class.

The study also revealed that language is the biggest challenge faced by students. As it is observed most of the students could not write or comprehend the Amharic and English language very well. The teachers have also attested to the fact that the way the Deaf students sign is the way they write. The teachers seem ignorant about Sign language grammar. The study also found that the major challenge which the parents face is communication with their children. They have also bemoaned the small number of schools offering education to Deaf.

On the question of whether Sign language should be taught as a subject, the study found that there was confusion as to whether the schools were teaching Sign language as a subject or not. While some teachers claim that they teach Sign language at lower grades, what they actually teach is simply sign vocabulary. Despite these weaknesses, the study also found out that the majority of the respondents want Sign language introduced as a taught and examinable subject at least up to grade twelve.

## **5.9. Recommendations**

The language of instruction is an element that needs to be considered from the beginning of the learning experiences and be treated as an important and integral aspect of the curriculum of Ethiopia. If, for example, deaf learners are to benefit fairly from the education system, their ways of communication should be catered for, in the system. Participants emphasized that the language of the deaf can be a major determining factor for their success. Every language is important to its speakers and if all students have to benefit, it has to be used in schools, regardless of the number of learners who speak or use that kind of language. The sign languages, for example, are primary languages for the deaf children and the appropriate genre of sign language should be applied. In order to improve language and education of deaf students in the deaf schools, this study has listed a number of recommendations and the list is endless. This aims to get rid glaring weaknesses in the education system to pave way for deaf children.

Since teachers are not fully equipped sign language during their training, there is need to improve on teacher training to empower deaf teachers to teach diverse learners including those with deafness. This problem can be minimized by revising teacher training courses for teacher trainees. It will be more helpful to declare sign language as a core subject at

this level. Secondly, more hours of sign language classes will be needed and this will ensure effective communication with deaf students in mainstream schools.

In regard to the teachers competence in the implementation of Ethiopian sign language the study recommends that the Ministry of Education should introduce proficiency examination in Ethiopian sign language to improve on the level of teachers' competence.

In regard to the medium of instruction to be used in the implementation of Ethiopian sign language deaf schools of Education should advice teachers on the importance of appropriate medium of instruction through in-service training to ensure uniformity in the implementation of Kenyan sign language curriculum.

Therefore, sign language training need to be extended to deaf teachers through professional development as a deliberate move by the government. This will require sufficient funding from national income to assist the very citizens through social service delivery like training and employment of sign language interpreters. This should be ongoing and within government strategic policy without waiting for the problem to come. Otherwise, it would be more meaningful to come up with clear alternative to educate deaf students in attached to deaf schools.

The availability of structures such as special pedagogic centers and special schools should be taken as an advantage where new knowledge can be disseminated to mainstream schools. Similarly, this can be achieved through workshops, joint planning and getting involved in peer teaching.

Secondly, the quality of teachers posted to these institutions for the deaf is below par. Most are professional teachers, but they lack the linguistic knowhow to use EthSL to impart knowledge to the deaf.

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## APPENDIXES

### Appendix I- Interview Guiding Questions for Teachers

Introducing the aim of the interview, the purpose of the research, also the contribution of their genuine response for the success of the research and respondent convince to give information and the valid of data were express for the respondent by the interviewer.

- Sex-
- Status-                    A. Deaf                    B. Hearing
- Experience (how many years) in educating the deaf \_\_\_\_\_
- Which subject do you teach? \_\_\_\_\_
- Qualification- \_\_\_\_\_
- Do you sign? If you use sign language, where do you learn it? (at collage or universities or pre-services training of the school, trainings, through experience from the deaf community or Other ways)
- Do the students act accordingly with the instruction expressed in sign language?
- What do you think are the problems that hinder the deaf people from getting equal opportunity in education?
- How many years have you been working in this profession?
- What are the major difficulties that the deaf children face when they start learning Sign language at a later age than their peers?
- 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?
- How do you plan to determine the amount of content you will cover within the semester?
- How does Early Sign Language development play an important role in literacy learning?
- Have you ever worked in inclusive school where sign language is used frequently?

- Do you believe that American Sign Language has influenced Ethiopian Sign Language?
- Do you think parents, caregivers, teachers and guardians are the chief resources in language development?
- Do you think sign language can play a role in early development in children?
- Do you believe that Sign Language has helped the child's early development?
- Would you like sign language to be used more in early development in school settings?
- How beneficial do you think sign language can be to early development?
- Do you believe that deaf children are more at ease in acquiring sign language than any other languages?
- Which teaching methods have you found to work well for deaf children?
- Explain challenges you face in using sign language at early childhood? What are the possible solutions?
- What language do you use when teaching the children with deafness?
- How do you work with all students, especially those who have not found Sign language?
- Describe a classroom where you have worked? What routines and procedures do you use to keep the class well organized?
- Do your students understand the contents of the subject matters when it is explained in sign language?
- Are spoken language and sign language different in the arrangement of sentences and grammatical structures?

## **Appendix II - Guiding Interview Questions for Deaf Students' Parents**

- Sex- Male      Female
- Age- \_\_\_\_\_
- Educational level \_\_\_\_\_
- Status-                      A. Deaf                                      B. Hearing

1. What do you think deaf means?
2. What do you think Sign Language is?
3. Do you use sign language at home? Where do you learn it?
4. How do you communicate with your child more easily?
5. Which language do you prefer to use while you communicate with your Deaf child at home? Why?
6. Do you think sign language education is equivalent with the spoken language?
7. How does your child move between the two languages?
8. How do you know your child has learnt to read and write?
9. Does she/he confuse sign language? What is the solution?
10. Do you think your child go through the lessons most successfully?
11. What are her/his strengths and weaknesses in their sign and other learning?
12. Does your child is behind her/his hearing peers in literacy?

### **Appendix III- Guiding Interview Questions for School Directors**

- What languages did the deaf children use when they came to school?
- Are the physical environments and learning /play materials suitable for children with Deaf?
- How much emphasis is given for sign language use in Deaf education?
- What is the stand of the educational language policy in about using sign language at early Deaf education?
- Do you have any other policy, strategy, manual or any other documents that guides sign language utilization in Deaf education? What about the practice?
- Who are responsible bodies of Deaf education to developing sign language education?
- What needs to be done to ensure better access teaching materials and dictionaries preparation, language development? What about the practice?
- Is it possible to say sign language is the mother tongue for the Deaf in present situation?
- Have you ever conducted a research to improve sign language use in education?
- What are the gaps and challenges facilitating schools for sign language use, adopting of text books, training teachers in the areas, etc?
- Do your school teachers have pre-service trainings of sign language to teach young children?
- What do you think is the role of the principal in the IEP process?
- Your general comment?

## Appendix IV: Observation Checklist

Date \_\_\_\_\_

- Grade level \_\_\_\_\_
- Number of students : M \_\_\_\_\_ F \_\_\_\_\_ Total \_\_\_\_\_
- The teacher's status \_\_\_\_\_

1. What is the teacher's intention of using Sign Language in this particular session?

- language of classroom management
- using sign language for social purpose

2. How do the teachers express new sign language?

- Is there any attempt at coinage?
- Is there shift to another language?
- When and how language is learned?
- Children learn the rules of language at an early age
- use, and time, without formal instruction
- the particular needs and abilities of the child
- the language used in their environment
- use Sign appropriately

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

- What are the teaching materials and the aids used?
- Do prescribed teaching materials like textbook adopted to fit with?
- How they are used for the lessons?

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

- How do the students be seated?
- Is there sufficient light?
- Is there unnecessary background noise?
- Where are the teaching aid and other learning materials?(if any)
- Are there are sufficient teaching materials in the classroom?

5. Level of social interaction in class/ school

- Do students play together?
- Behavioral issues.
- Children's interactions with playing materials and/or peers
- How long does the child spend with the materials?
- Does he or she engage others?
- 

6. What does the general situation of sign language usage in the teaching learning process look like?

- Does the child use symbols to communicate thoughts and ideas?
- Does he or she engage others?
- Is the child able to retell stories that have been frequently read in class?

7. How is the teacher interacting with all students, especially with those who have behavior Problem?

- When activities are teacher-initiated, how does the child react?
- If the activity is child-directed, how does the child react?
- Does the child seem to function independently?
- How much individual attention is requested?
- How does the child handle transitions, routines?

8. What do the children do while learning Sign language in DRAMATIC PLAY

- How does play get started? Does the child initiate it? The teacher? Another child?
- What roles does the child tend to play?
- How long does the child's participation last?
- What or who seems responsible for the ending?