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**A Study on Teaching of Reading and Writing to Deaf Learners in
Primary Schools in Some part of Ethiopia**

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Abstract

This study investigated into how deaf learners are taught reading and writing in primary schools in Ethiopia. This study adopted the qualitative case study design with the engagement of interviews and observations of lessons being taught. The observation technique used, postponed note taking way of recording was used for gathering information based on classroom teaching behaviors. A total of 3 head teachers and 7 teachers from three different schools in different districts participated in the study. The results of this study revealed that: the teaching methodology adopted by the teachers was characterized by the use of elements of sign-language, demonstrations, illustrations, and use of varied instructional materials. The methodology followed the whole word/sentence approach of teaching language. The teachers also demonstrated little knowledge of comprehensive methods of teaching reading and writing to deaf learners. The teachers were aware of the need to maintain eye contact and interpersonal relationships with the learners. They were conscious about the use of space for signing. The teachers methodology was impacted on by the level of provision of and nature of instructional materials used in teaching reading and writing to the deaf. Low inputs from the managers, for example, resulted in limited availability of instructional materials. The study concludes that there is need to revisit programs and methodologies for teaching learners who are deaf to read and write. The study recommends among others; improvements in pre- and in-service teacher training programs, revisiting the level and type of parent support and involvement regarding the education of their children with deafness.

Table of Contents

Contents	page
Acknowledgement.....	i
Abstract.....	ii
Chapter One	1
1. Introduction.....	1
1.1 Background	1
1.3 Objective of the study	3
1.3.1 General Objective	3
1.3.2 Specific objectives	3
1.4 Significance of the Study	3
Chapter Two.....	4
2. Review of the Literature.....	4
2.1 Deafness: Deaf, deaf, and Hard of Hearing	4
2.5.6 The teaching of reading to the Deaf	19
2.5.9 The Importance of Instructional Materials in Teaching Language	22
3. Research Design and Methodology	23
3.1 Study area and period	23
3.2 Study Design and Methodology	23
3.3 Population and Sample.....	24
3.3.1 Selection of the Schools.....	24
3.3.2 The Study Schools.....	24
3.3.3 Selection of the Respondents.....	25
.....	25
3.4 Data collecting procedure.....	26
3.6 The Interviews with the Tteachers	28
3.7 Interviews with the Head teachers	28
Chapter Four.....	29
4. Data Presentation and Analysis.....	29
4.1 Head teachers and Teachers from Three Schools.....	30

4.2 Teaching Materials	31
4.3 The lesson Observations	31
4.4 Conclusion on Instructional Materials.....	32
4.6 Teachers' Methodology	33
4.6.1 The lesson Plans	33
4.6.2 The lesson observations (observation on use of the methods).....	34
4.6.3 Teacher Movements.....	35
4.6.4 Learner Activity	36
4.6.5 Lesson Observations	36
4.6.6 Setting/Learning Environment	36
4.6.7 Teacher Perceptions.....	36
Chapter Five Discussions and Conclusion	37
5.1 Discussion.....	37
5.1,2 How are reading and writing taught to deaf learners?	40
5.12.1 Instructional Materials	40
5.1.2.2 Teacher Movement Patterns	41
5.1.2.3 Learner Activity	42
5.1.2.4 Learning Settings/Environment.....	42
Recommendations	46
Appendix 1: Guiding Question for Interviews	
APPENDIX 2: Interview Question for Head teachers	
Appendix 3 Giuding questions for observation	

Chapter One

1. Introduction

1.1 Background

The ability to function effectively in the literate society demands the ability to read and to express oneself in writing the importance of literacy is proved by the fact that reading and writing had been cornerstone of education from the beginning. In many ways reading may be considered more important for deaf individuals than for the hearing. Limited in the amount of general information available through word of mouth, a deaf individual may have access to the large culture to the extent that he or she developed fluency in reading. Similarly, his or her communication to many hearing individuals may be largely dependent on the extent to which writing fluency had developed.

Nevertheless, teaching reading and writing to hearing impaired children is not such an easy task. This is due to the fact that they do have linguistic experience different from their hearing peers. In related to this, Moores (1976) states that at first glance, deaf children do not seem to be at the same disadvantage in reading and writing as they are in expressive and receptive oral communication. Closer examination, however, shows that learning to read and write is a more difficult proposition for most deaf children than for the typical hearing children. The hearing child can learn the graphic system on the basis of a fully developed phonemic system, because although English has many inconsistencies (for example, ough is pronounced differently though, through, and rough), there is a basic phoneme-grapheme or sound-spelling, correspondence. The deaf child on the other hand, usually does not have an already acquired mastery of the English sound system to rely on in acquiring literacy. Deaf children may have one potential advantage in learning to read and write-their knowledge of the American Manual Alphabet. Each of the English Alphabet has a counter part in the American Manual Alphabet. This one to one correspondence is much more efficient than phoneme-grapheme correspondence between spoken and spoken English.

Knowing the advantages and disadvantages as well as the difficulties of deaf students in learning reading and writing in contrast to their hearing helps teachers of deaf children to devise their teaching method or approach in such a way as it matches with their deaf student's language learning ability and strategies.

Therefore, this research aimed at studying the teaching reading and writing to Deaf children in some part of Ethiopia.

1.2 Statement of the Problem

In Ethiopia, deaf (hearing impaired) children are taught English language in inclusive classroom or in unit classes in government school. They also go to special need schools known as school for the deaf. Where ever they go, they get language teachers graduated from colleges and universities. These teachers take courses about language teaching methods and approaches most of which are irrelevant to teaching deaf children. In fact they take a course entitled 'Special needs' in which they learn all students', including deaf children, who have their own special needs and should be taught according to their needs, but it is too narrow to deal with the needs that hearing impaired children have, in contrast with their hearing peers, especially, in learning reading and writing. Besides, most literatures and studies of language teaching methods focus on teaching hearing children. So when teachers who lack appropriate training and lack of literatures on how to teach Deaf children reading and writing are assigned to teach deaf students, it seems they face a great problem. Although they try to overcome the problem by applying all the teaching methods which they studied at colleges and universities the task won't be that easy. The researcher of the current study has taught English language to deaf students for nearly 13 years, yet he feels unsuccessful in teaching reading and writing to deaf children. Although through experience he tried to know what language needs do deaf children have and devised his teaching method likewise, he realized that very few of his student can read and write correctly even after graduating high school. In fact this is common reality in other schools for the Deaf too. Griffiths and Howarth (1981) stated "The majority of deaf children leave their schools illiterate." Besides the researcher met professors and Doctors who had long time experience in teaching English Language to deaf students at Gallaudet's University in America, and asked them whether their students could read and write correctly as English Language is used widely in their community unlike in Ethiopia. The Instructors responded that writing and reading was a difficult task to deaf learners even in America, so they wanted to learn a lot from him, the researcher, So all these motivated the researcher to study how deaf students are taught reading and writing in various schools in Ethiopia. As far as the researcher

is concerned, no local research was conducted on this topic, but there were a lot of foreign researches most of which focused on reading and writing achievement of Deaf children. To mention a few ,for example Wibur(1977) pointed out that the deaf children appears to tackle writing task ‘sentence by sentence’ unsure about connecting device and puts her ideas together without formal grammar. McGill-Franzen and Gormley(1980) in his part studied how deaf students read and found that deaf students could understand grammatically complex structures better when they were contained in a familiar fairy tales than when they were presented in a story than in isolated sentences. These two researches attempted to study how deaf children write and read and the difficulties they encounter in doing so. But in contrast, the current study, Teaching Reading and Writing to Deaf children in Ethiopia, focuses on how Deaf children are taught reading and writing in various part of Ethiopia. There for it attempts to answer the following research questions.

Research Questions

- What strategies are used in teaching reading and writing to deaf learners?
- How are reading and writing taught to deaf students?
- What are the problems faced by teachers and learners during teaching and learning of reading and writing?

1.3 Objective of the study

1.3.1 General Objective

The main objective of this study was to investigate how teachers teach reading and writing to deaf learners.

1.3.2 Specific objectives

- To find out how reading and writing are taught to deaf students
- To identify the strategies used in teaching reading and writing to deaf learners
- To find out the problems faced by teachers and learners during the teaching and learning of reading and writing

1.4 Significance of the Study

This research tries to find out how English language teachers of deaf students of various schools in Ethiopia teach reading and writing their students. Hence, its finding helps the teachers of deaf

children to compare their methods and approaches and share experience one another. And it also helps them to revise their teaching methods and follow the suggestion given by the researcher. It also helps the supervisors to realize the problem teachers encounter in teaching reading and writing to deaf children so that they can help them and make sure whether the teaching method is improved. Curriculum designers also can use this research as a good input, in preparation of English Language text book, to consider how deaf children should be taught reading and writing. Since this topic is rarely studied, this research motivates other researchers for farther study. Most importantly, the finding of this study helps deaf students develop their reading and writing skills as their teacher can review their teaching methods and approaches and apply the suitable ones to them.

Chapter Two

2. Review of the Literature

2.1 Deafness: Deaf, deaf, and Hard of Hearing

In order to clarify the semantics of deafness, the researcher referred to the ASL University resource website (www.lifeprint.com) to discuss the different meanings behind the terms Deaf and deaf: [Deaf] refers to embracing the cultural norms, beliefs, and values of the Deaf Community. The term "Deaf" should be capitalized when it is used as a shortened reference to being a member of the Deaf Community]. The condition of partially or completely lacking in the sense of hearing to the extent that one cannot understand

speech for everyday communication purposes. (d/Deaf, ASL University, n.d.) One can be Deaf without being deaf; for example, hearing children of deaf individuals are often considered culturally Deaf. When the terms are capitalized, it signifies the association to a culturally Deaf group.

The terms deaf and hard of hearing represent two different groups of individuals with hearing loss, and there is a difference in the needs between the two groups. For the purpose of this paper, a deaf person is defined as one who's inability to hear prevents successful processing of audio logical linguistics. In contrast, hard of hearing identifies a person who is able to sufficiently enable processing of audiological linguistics, often with the use of amplification and hearing aids (Rodda & Eleweke, 2000). Throughout this paper, I will alternate between the use of deaf or Deaf, depending on the context in which their differing uses are appropriate. It was Kimberlé Crenshaw (1989) who first introduced the term intersectionality as representing a spectrum of intersecting identities that make up an individual. These include a person's race, class, and gender, but also their various abilities and the communities to which they belong. It is important to note that d/Deafness is made up of an intersectional spectrum of identities, ranging from hearing children of deaf parents to individuals with various levels of hearing loss and/or hearing through the use of hearing aids or cochlear implants. Although the study of Deaf culture and evolution is certainly significant and necessary to pursue in education, research, and society, it is beyond the focus of this study.

2.2 Factors Responsible for Teaching Reading and Writing

2.2.1 Language

Language is very crucial to this study for the obvious reason that the study itself is about two critical aspects of language; reading and writing. It is also either through the existence of a language skill or use of language such as reading and writing, that language itself can be learned or developed. Language can either be transmitted through verbal /spoken language or non-vocal communication (Bonvillain, 1999). 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). Briggle (2005) then explains some factors that lead to language learning delays among deaf and hard of hearing children. Some children may be language deprived up until their school exposure, which might be

their first experience with a competent language model. In order for one to read, one has to have language skills (Moore, 2006)

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. Ramsey (1997) 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, 1956) 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 English 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.

2.2.2 Teaching

Various educators have explained the methods of teaching reading and writing in various ways. The available study does highlight McGuiness (2004) who names the methods of teaching reading and writing to include the phonic methods (methods that use the phonemes), syllabic methods (that use the vowels and consonants), eclectic methods (which combine of all the methods) and look and say or look and sign methods (methods that include the whole word, whole sentence, whole story, and whole picture; these methods demand for the teaching in wholes, that is to say no to breaking up words in syllables or phonemes or to the teaching of stories in parts).

This study also adopts the definition of methods, techniques and strategies as explained by Perrot, Saberi, Brown & Strybel (1990) who observed that the terms “method”, “technique” and “strategy” were often loosely used by teachers to mean ways of teaching; when the words actually referred to different though related activities. A method is explained as the way a teacher decides how the students will learn. It involves a choice between whether learners will mainly be told, or will largely find out by themselves. If the students have to be told, then this culminates into passive methods. If the learners on the other hand have to participate in finding out by themselves, then teachers are using problem solving methods. Perrot et al (1995) sees techniques as those specific actions and processes through which the teaching method is realized. Strategy is looked at as simply the sequencing or ordering of the techniques a teacher has selected to teach the lesson.

While discussion and demonstration could be treated as methods in other disciplines, in teaching of language or reading and writing they readily could qualify as techniques, depending on where the teacher puts the thrust of his lesson.

Teaching forms the core of the study, given that it is the concept that is directly being investigated. This research associated itself with the definition that explains teaching as the interaction of a student and a teacher over a subject (Snell, 1999). In this case (study) the subject is reading and writing while the students are the deaf learners. Much as this study doesn't consider the teaching without the physical presence of the teacher, it would be informing to know that the teacher's physical presence may not always be required but through TV, computer, CD and the like teaching could be transacted. It will also be crucial to observe that there can be no teaching without the presence of a learner. During the teaching/learning processes, teachers have to gauge and make tough decisions regarding content, method, space/setting, timing, resources and the like (Davis,1997). This is equally critical for teaching the deaf learners. Critical to any teaching/learning process is the feedback. If a teacher does not know how to look, she/he will not see much. Teachers for the deaf students need to know how to look (observe for this case) because any language used for the deaf learners is visual in nature. Byrnes (1998) pointed out the importance of a teacher getting attention of the learner who is deaf, make sure the speaker's face is visible to the learner by avoiding covering the mouth or chewing while teaching, avoiding walking around the classroom

or turning towards the board while giving instruction since learner who are deaf have difficulty following conversation that move around the room.

2.2.3 Learning

The study is investigating how deaf learners are taught how to read and write. There is no way one can be taught without learning being the outcome or output. Ramsey (1997) 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. She advanced that 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 (1978) strongly 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 (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".

Vygotsky(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 teacher's 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/her own proficiency.

2.3 Challenges of Teaching Reading and Writing to Deaf Learners

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 metacognitive 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.

2.4 Language Acquisition Theory

Several theories could be engaged in an attempt to explain and understand the roots that the teaching of reading and writing is based on. For this study Kristen's (2003) theory of second language acquisition was preferred. 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 Sign language) for communication and learning at school. In most cases the Uganda 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." Krashen (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 particularly with the messages being communicated. This explains why a sign may be required repeated or explained, as signs could distort messages. I do note that during the play time, the learners who are deaf may not necessarily go through all this procedures.

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 peers (children, persons) who know Uganda 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/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 pictures, maps, diagrams, writing style.

2.5 The Related Studies-on Methods and Strategies

This section discusses the methods and strategies used by various countries (Nations) in teaching reading and writing to the deaf. The methods and the strategies are presented following the trends regarding their emergence on the scene and their use for teaching reading and writing.

Literature regarding deaf people around the world does suggest specific similar patterns observed by most countries, for teaching/learning purposes and in connection to teaching the deaf how to read and write. Trends have followed specific use of strategies and methods, namely, inclusive

methodologies; use of sign language; use of the oral methods; engagement of total communication. Medical Technologies have been used to support the teaching of reading and writing to the learners who are deaf to boost the hearing of the learners. It is important to identify the differences in language structure between written English and sign language. Written English is the second language of the deaf. The verb and adverb structure is complex and difficult to learn radically different from the more concise structure of sign language. Signed sentences are typically made up of nouns strung together and heightened by facial expressions. For example, "You are so kind!" in written English may become "You kind!" with an appropriate smile in ASL. When teaching reading and writing to learners who are deaf, teach the basics. Write single letters, using finger-spelling and ABC charts or books with pictures to help the student recognize written letters. This will be rote memorization, but it is an important step. Focus on nouns and even adjectives using pictures and objects. Help your student identify a picture or object using Sign language, then finger-spelling, then writing. Encourage her to compose simple, short words stringing letters together (cat, sad, mom). Arrange a series of pictures to show a complete but simple sentence. As the deaf student advances, mix up the pictures and have him arrange them into a coherent form. These can be creative or teacher-led. Determining that a student has internal acquisition of written English is an important step in teaching a deaf learner how to read (Reubell, 2010).

Pre-reading activities are most important at lower levels of language proficiency and at earlier stages of reading instruction. As learners become more proficient at using reading strategies, you will be able to reduce the amount of guided pre-reading and allow students to do these activities themselves.

2.5.1 Use of Sign Language as a Factor Associated to Teaching Reading and Writing

The history of sign language dates back to the ancient Greek philosophers. By the 5th century B.C Socrates had thought it perfectly logical for deaf people to communicate using their hands, heads, and other body parts (Dominguez, 2009). Cardano, in the sixteenth century, proclaimed that deaf people could be taught to understand written combinations of symbols by associating them with the things they represented (Butterworth & Flodin, 1995). Sign language started being used for instruction about in 1620. This followed the use of the first Manual Alphabet that was published by Pablo de Bonet. This was then later to be followed by the first school for the deaf in Paris (Butterworth & Flodin, 1995). The manual approaches were very popular in the 1800s and supported by the hearing communities, although there was also continued debate over this among the educators of the deaf.

Literature reveals that the manual approach originated in Paris, France at the French National Institute (the world's first public school for the deaf) and later got introduced to a large number

of European countries. In the USA, for example, it got introduced in the school of the deaf in Hart Ford, with support of Gallaudet (1817). Sign language (that then included signed versions of spoken/written languages) was used at all times with or without classes. Gallaudet University in Washington D.C. USA (the world's first liberal arts college for the deaf) was instituted purely as a signing institution. The brightest deaf students enrolled in this institution. All teaching/learning transactions engaged sign language. This era was then referred to as the "Golden Age of Deaf Culture and later followed by the Dark age of Oralism (Moore, 2009).

Studies in relation to American Sign Language, for example, revealed that there was growing evidence that knowledge of ASL correlated with reading and English ability (Padden and Ramsey, 1998). This was the time ASL was getting recognized as a language. It would be of interest for the available study to demonstrate the understanding of "sign language" on the part of the teachers. It could be possible that some teachers were treating "sign Language" as a method, while others were taking it as a language. Vonen's (2007) observation that Deaf communities are predominantly bilingual communities. He claimed that there was a constant contact between sign language and the spoken language(s), readily detected in the form of mouthing that he observed were derived historically from the mouth movements" characteristic of the corresponding spoken word and other borrowed Language elements.

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/learning processes is the well planned instruction in English vocabulary, English grammar and the structure of written texts (for those who use it).

2.5.2 Oral Approaches

The oral approach has existed since the mid-18th Century, practiced early in various European countries. Sign language and oral methods were in most cases used by a number of countries. Available literature specifically suggests that the oral methods of teaching the deaf learners to read and write existed about the first half of the 19th century as the Manual signs, except that

there was a bias towards the manual signs regarding several users of the modes. This method exploited the engagement of the residual speech/vocal aspects of the learner. The approach targeted at training the deaf person to use their residual hearing, speech reading and listening skills, with emphasis placed on listening (aural skills), to comprehend spoken communication and develop proper speech skills. The approach does not promote the use of sign language. More specialized methods such as Auditory Verbal Therapy and Cued Speech all have roots in the basic oral approach (Rachel, 2008). One has, however, to be cognizant of the fact that Cued Speech is a system for making speech sounds more visible, hence being related to the use of the manual alphabet. Gallimore (2000) observed that cued speech substitutes visual representations for sounds that are heard by the hearing people but are seen with eyes for those who cannot hear. Oral communication is a mode of communication that relies solely on speech (Fitzpatrick, 2011). The underpinnings of the Oral approach are based on assimilation to the hearing world, which the deaf learners are expected to gain from, as they prepare to join it. Chaoyu (2006), however, observes that the oral method risks a child's linguistic, cognitive, social and personal development.

Ramsey (1997) observed that: "Most deaf learners were even expected to acquire the spoken language in English, in spite of the fact that they were not part of the English speaking Communities. This resulted into lack of intelligible interaction support (a pre-requisite for first language acquisition); early literacy development that would facilitate the unlocking of the learner's inner symbolic power as well as affording admission to a social world." (p. 3)

In China, the approach continued to be dominant in all schools that were enrolling the learners who were deaf, following the fact that the government policy upheld it (Yang, 2002). This was equally true for the case of New Zealand (ABHR 1879, cited in Townsend (1993), India (Randhawa, as cited by Moores, 2009) and Singapore (Guarinello, Santana, Berberian, & Massi, 2009). Singapore, however, had some children taught by means of written language and subjected to speech training and speech reading; though they received fragmented spoken language (Botelho, 2002, Guarinello, 2007). The main difference from other countries using the oral approaches was only on the emphasis on using the written language to cause the speech reading and writing and the speech training programs. In Germany, it was understood that only the oral method of teaching was practiced in the institutions/schools of the deaf. The German teachers for the deaf preferred the oral methods and the spoken language to any other method (Schuman, 1940). England established schools for the deaf 20 about the same time then and emphasized the use of the spoken language and speech reading; just like other countries; and for example Germany

Studies reveal that phonemes could be used in teaching the learners who are deaf to read and write. This method involved matching written letters to sounds. Kozulin (2001) observed that matching written letters to sounds yields improved reading and spelling for normal hearing children. When the deaf learners were subjected to testing using the same instruments (matching the letters to sounds), their phoneme awareness and phoneme graphemes correspondence knowledge (awareness of sounds) were boosted. This increased their ability to engage in reading, spelling. She however warned that the development of phonological experience depended on early experience of an input where phonological constructs are displayed and specified. This agrees with

Leybaert and Alegria (1995) who observed that inaccurate speech representation, delivered from lip reading, could impact negatively on their reading and spelling.

However, the use of auditory – oral approach requires hard work from teachers, parents and the children. This approach, just like other specific aspects of oral approach; does discourages the use of signing but requires intensive early interventions requiring individualized programs, use of cochlear implants where possible and use of hearing aids to boost the hearing abilities. Plenty of opportunities to use the spoken language throughout the day would equally be crucial, for those with a hearing loss (Moog, 2000).

The use of the manual approach came about the same time as the oral methods. However there was an emphasis on this approach in the earlier stages of instruction for the deaf, resulting into conflicting perceptions and philosophies regarding the best approach to use. The disagreement was based on the fact that manualists were convinced that the deaf learners were subjected to very tedious methodologies of learning language. The schools that were using the oral approaches were claimed by the manualists to leave no time for the learners to gain academically and socially. The oral methods involved the learners touching the teacher's face, throat, and chest to feel and appreciate the vibrations of sounds and also to watch the teacher's lips move

during each sound. It was a method seen by the researchers to yield maximum results in reading and writing (Moores, 2009)In China, the Chinese supported the oral methods, the Chinese sign language and the sign supported Chinese, for teaching of deaf learners. Students who failed to understand the sign-supported Chinese displayed unproductive behavior (Biggs, 2004, Johnson, 2003 and Yang (2006). It was equally observed that learners demonstrated true capabilities, likes and abilities, when they were taught in their first language Chinese Sign Language, (Biggs, 2004 Lytle et al; 2006).

2.5.3 Total Communication

Total communication is the use of any means of communication such as sign language, voice, use of sign and speech at the same time (sim-com), finger spelling, lip-reading, amplification, writing, gesture, visual imagery (pictures). Often the sim-com 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). Literature suggests that Total Communication came in place by the 1950s. It emerged as a way of easing the rigidity of the oral approaches. The approach emphasized the interplay of various modes in the teaching of the deaf. Several countries that had engaged in the use of oral and the sign language methods for teaching, took to Total Communication. Germany, for example, which had then a special preference for the oral methods, later yielded to the use of

the then attractive total communication approach (Gunther, Hennies & Hintermair, in Moores & Miller, 2009).

Baynton (1996) claimed that by the mid-1960s, it became clear that for Deaf students, the oral-only method was a dismal failure, with average academic performance of deaf students far below that of their hearing peers. With the surge in research on 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 re-introduce 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; Tevenal and Villanueva, 2009). Total Communication also proved ineffective for most deaf students, since it could not provide students with access to a complete language in either English or Sign Language. Research revealed comparison of the message understood by hearing and deaf participants when information was presented using SimCom, and found that the “comprehensible inputs received by Deaf and hard of hearing participants on the one hand and hearing participants on the other are not equal” (Tevenal and Villanueva, pp. 284-285).

A multimodal approach (combination of modes using visual and auditory channels) also came in use. This, too, called for the use of the medical technologies, such as the use of cochlear inputs. Developed countries, such as New Zealand, later went in for the use of the cochlear implants, planted into the young children’s ears to cause the hearing abilities (Most, 2006, Wiesel, 2001). Children who got their implants before age 18 months had significantly greater rates of spoken language comprehension and ability to speak than kids who got them later (Barker et.al, 2009) Given that some learners had then cochlear implants, it was inevitable to engage audition, speech

reading, print and other productive teaching/learning modes deemed relevant by the teachers. Vonen (2007) observed that if cochlear implantation is done at an early age, children could acquire spoken language skills. Children who use the cochlear implants do surpass those with similar hearing degrees of hearing loss but who use hearing aids for speech recognition, speech production, language content, form and reading (Martinez & Hallahan, n.d). Early intervention in use of this equipment and other related programs do too augment the difference (Martinez & Hallahan, n.d).

2.5..4 Sign Bilingualism as an Approach

Of interest to note was the practice of bilingual bicultural approaches by Ontario (Fitzpatrick,2011).The use of this approach benefited from the

concept that a learner had a first language, the sign language, while the second language to be taught then was English language (in case of English speakers). This approach hence targeted at facilitating development of both languages. . It will be observed that Sign Bilingual approaches, like other approaches used in deaf education; are characterized by teaching reading and writing. The instruction of the deaf however localized on sign language, while the teaching of the deaf culture and the hearing culture was also carried out to instill the attitude of belonging to a group of people. Several other countries took to the use of the bi-lingual method for teaching. In Korea, for example, the bi-lingual/bi-cultural approach was believed to improve the reading and writing achievements of the deaf learners that were scored in the third or fourth grades at the standard achievement tests. The method was not only seen to improve reading and writing abilities, but also the quality of life; though teachers faced managerial challenges such as concept of inclusion and cultural concept .(Moore & Miller ,2009); typical challenges teachers usually are confronted with even in the use of other approaches.

In Australia, the learners who were deaf were also exposed to bi-lingual and bi-cultural programs at school; while a study regarding bi-lingual education in China; demonstrates that there was a positive impact on the learner with deafness, on participation ((Moore, 2009). Developments in Singapore system were characteristic of those nations using the oral approach. The only difference is that Singapore (just as many schools in the USA have done)has for example, promoted use of total communication but with a system for visualizing spoken English known as Signing Exact English (Singapore, Ministry of Education, 2006). Their approach included adaptation of individual hearing aids, speech reading, speaking and writing. The use of any linguistic communicative resources and modes that stimulated the hearing was encouraged (Ciccone, 1990). It will be noted that Singapore had earlier emphasized the use of a mode that embraced both the oral approach and sign language. Students in the special class programs in Singapore were however subjected to total communication, but without the auditory – oral approach (Singapore, Ministry of Education, 2006). Mayer & Akamatsu (1999), claimed that sign languages and spoken languages could both play equally important but different roles in the

acquisition of written languages by deaf children. In their opinion, any model of reading acquisition of deaf children should acknowledge and explain the roles of both languages in the acquisition of written languages.

Brazil, meanwhile, had the simultaneous communication that engages the oral language and manual codes) that was used by many classrooms for the deaf. This approach facilitated the learning of written Portuguese language, but with intensions to develop the oral language and its written form (Moura, 2000). The manual communication was believed, too, to be beneficial academically (Moore, 2001).

2.5.5 Contemporary Trends in Reading and Writing among Deaf Learners

The contemporary trends have taken advantage of the earlier approaches. This section will highlight some of the approaches and methods that have been developed to other approaches/methods of teaching reading and writing. The earlier approaches taken advantage of include use of the Sign language, Oralism, Total Communication and Bilingualism.

The teaching of reading and writing to the deaf is constantly being transformed through the increased interest and several studies carried out on the subject. Reubell (2010) observed that the deaf use an alternative pathway, specific to reading, not used by people who hear. It will however be noted that reading to deaf learners (an approach that has its base in the bi-lingual approaches) has been observed to be instrumental in the teaching of reading and writing to the deaf. The belief is that the simple most important activity for building the knowledge required for eventual success is reading aloud to children (Schleper, 1996). The methodology advances the following specific tasks to be observed by the reader: deaf reader translates stories, keep both languages viable, not constrained by text re-read stories or storytelling and reading continuously, follow child's lead, make what is implied explicit, adjust signing style to fit story, connect concepts in the story to read, use attention maintenance strategies, use eye gaze to elicit participation, engage in role play to extend concepts, use variations to sign repetitive English phrases, users provide a positive and re-enforcing environment and expect the child to become literate. However, it is challenging as some children could be profoundly deaf.

Other modern variations include finger-spelling which relies on the use of the Manual Alphabet. Some allow signing (a basic ingredient of sign language) as auxiliary mode (commonly learnt as the sign supported approaches) while others engage the pure oral approaches which forbid the use of any manual communication. In such cases cochlear implants are used as an integral part of the oral based program. The use of Phonics (that has its roots in oralism); one other approach, focuses on hearing to parent connections between sounds and the words and understand how it looks like when written. Alternatively one would use the whole language approach that focuses on seeing the pupil learn to read first, followed by how to say and spell the words. Puente, Alvarado and Valmaseda (2009) observed that the teaching/learning methodologies for teaching

the deaf first engaged the oral and written bilingualism. These modes were characterized by attributes such as signed speech which were used to complement and reinforce spoken

communication, finger spelling used as a support strategy in reading and writing, sign language and cued speech.

Gates & Chase (1926) observed that the deaf learn spelling by use and perception of visual forms. Likewise the teachers could use the manipulative Visual Language tool, to help children visualize sounds they can't hear (Berke, 2010). It naturally follows that guided reading and writing for the deaf and hard of hearing children, would hence highly be dependent upon the effectiveness of the teacher/teaching processes. Guided reading and writing here refers to an approach for teaching reading and writing of words and language. The reading material or the books to be read is usually a little harder than those usually read by the learners. The teachers' role is to assist the learners in developing fluency, confidence, and insights into themes, styles, divergent opinions, and various forms of literature; while invoking their responses based on their own thoughts, feelings and opinions about the reading process. The teachers have to engage in guiding the learners to discuss and explore the reading process, so that the learners can develop literacy skills which they could later apply to what they learn; when they read and write independently. The teacher guidance in discussing and exploring the reading process triggers the development of literacy skills, a prerequisite for reading and writing independence (Laurent Clerc National Deaf Education Center, 2011). Israel, where the support systems in the schools are provided by certified teachers of the deaf, educational counselors, speech/language clinicians and tutor, takes this very seriously (Moore & Miller, 2009).

Several other tests have been carried out to determine the nature of the phenomenon – reading and writing (Miller, 1991). These tests took cognizance of the fact that literacy is of two highly interrelated components, namely reading and writing. They also observe that literacy is of a higher order category that engages person to person oral and manual communication. Studies have suggested that the functional reading ability of the deaf learners is much higher than standard scores as indicated often by achievement tests. They have also demonstrated that the deaf learners use their cognitive abilities and knowledge of the world to compensate for the grammatical challenges of writing. Emphasis on functional meaning other than syntax is hence more meaningful and productive, justifying the need for a more holistic, functional, semantic-based instruction (Stanovich, 1990).

Other particular tests were designed to determine the correlations of measures for factor scores for reading and writing for the deaf children with hearing parents and children of deaf parents. The

correlation category tended to be higher for reading and writing than for hearing, language proficiency or speech production. Cummins (2006), cited by Vernon (2007) revealed that students from both Deaf and hearing home backgrounds, who had developed strong ASL proficiency, had significantly better prospects for developing adequate English literacy skills. Vernon (2007) also noted that sign languages had a potential as tools for learning. In a related study of short-term memory, the results revealed that the deaf students performed at a lower level than hearing students. However, after teaching appropriate strategies to deaf students, it was found that the deaf children could function at the same level as the hearing children. The conclusion was that the initial lower performance of the deaf students was not due to a cognitive deficit but knowing which strategy to apply. The argument here is that whatever academic difficulties the deaf have should be interpreted as absence of exposure and to what they don't necessarily do, other than what they can't (Mayer & Akumatsu 1999). The results however did suggest that world knowledge, vocabulary and bottom up skills such as syntax and morphology had substantial inputs to reading and writing.

These methods also recognize the freedom of the learners and the parents to make decisions on what mode of communication to adopt. Some learners would be comfortable with one or more combinations of modes. What is critical is however the support service required to maximally benefit from the education system. Services such as those of audiologists, management of hearing aids, listening devices and environment are always crucial. Computer speech instruction methods designed to provide visual speakers in articulation; do, too, improve sound production.

It will be of interest for this study to see what aspects of these trends are being engaged in teaching of reading and writing to deaf pupils; given that most teachers in primary schools may have not specifically been trained on the use of these approaches. Pupils also move from one school to another hence being exposed to various modes of learning reading and writing. Finally, if they have been engaged at all, how has it been handled, and which has been prominent.

2.5.6 The teaching of reading to the Deaf

The traditional approach to developing adult reading fluency to provide an elemental step-by-step building program of instruction. Recently however, interest has been growing in a more wholistic, natural, semantic approach to developing reading. Although the use of terminology

such as "top-down" and "bottom-up" models tends to obscure the issue, the division is between advocates of an elemental approach and advocates of a holistic approach, just as the teaching of speech and grammar. As might be expected, there is little evidence to support either approach so far, although work done to date seems to favor the use of a holistic approach so far. In practice most teachers do not adopt an either-or position but grammatically mix elements. The question is what kind of a mix would be productive Moores, D.F. (1996)

Yurkowski and Ewoldt (1986) claim that step by step incremental approach is unnecessary, because deaf readers have a strategy of bypassing syntax and processing print on the basis of meaning. They argue that the research on which the controlled grammar approach based sentences in isolation rather than in a connected discourse, which would more adequately reflect a real reading task. Yurkowski and Ewoldt conclude that grammar is not unimportant but is secondary to pragmatic and semantic components in a top-down model of reading process such as that developed by Goodman (1967).

Yurkowski and Ewoldt (1985) state, "preparing the reader to meet the text, is the focus of instruction in the whole language instructional model based on Goodman's work. Unfortunately current instruction focuses on preparing the text to meet the reader."

Stanovich (1980) developed an interactive compensatory model of reading designed to address the development of reading proficiency by taking into account individual differences. Stanovich claimed that bottom-up serial-strategy models of reading and reading development run into difficulty because they contain no mechanism whereby higher-level processes, such as semantics, can affect lower level processes. Stanovich was also critical of top-down models in which higher-level processes are as directing the flow of information through lower-level processes. In a top-down model, reading is seen as semantically driven—that is, meaning is the most important element. Stanovich argued that reading is neither bottom-up nor top-down but is in reality interactive; it involves a synthesis of simultaneous processes at several different levels. Levels are more independent in an interactive model than in a top-down model, where semantic process directs lower-level processes. Stanovich claims that an interactive model provides a more accurate description of how a fluent reader functions than does any other paradigm.

As it has been explained above different researchers and language experts have said a lot in favor of various models and approaches, nevertheless, the safest side for the language teacher is to use the combination of all models or choose the one that is suitable for their deaf students in the actual classroom.

2.5.7 The Teaching of Writing to Deaf

Evidences show that the problem of deaf children face in mastering written English are more formidable than those they face in developing reading skills. A deaf person resorts to compensatory strategies to understand a message when grammar and vocabulary skills are

limited. It is much more difficult to express oneself clearly in writing in the face of these limitations. Although its benefit may not be as immediately obvious as that of a compensatory to reading, a compensatory approach to writing is called for. Part of the problem is that research writing with deaf children has lagged significantly behind that of reading. Much of the work was conducted decades ago and reflects primarily a concern with grammar and vocabulary, much like the traditional research on reading. (Moore 1978, p.282)

Moore continues his discussion and states that since 1980, however, most work conducted on the teaching of writing to deaf children has had functional, semantic orientation, suggesting that in all aspects of communication- both written and person to person- the trend in education of the deaf is clearly toward an acceptance of the primacy of meaning and away from the importance of mechanics.

Teaching of writing as product and teaching of writing as a process are both helpful teaching methods in deaf literacy. But Dahl (1985) and Laine and Schultz (1985) argued that there has been a shift in education from the teaching of writing as a product toward the teaching of writing as a process. In the past, emphasis at the beginning stages of instruction was establishing the mechanical aspect of writing may occur as part of the communicative effort and need not be a prerequisite for it. The emphasis is on writing as a creative activity and not as a goal to be achieved through a series of incremental steps involving specific subskills as building blocks

2.5.8 Instructional Materials

Instructional Materials, also known as Teaching/Learning Materials are any collection of materials including animate and inanimate objects and human and non-human resources that a teacher may use in teaching and learning situations to help achieve desired learning objectives. (Lewis, Beth 2018-05-10) Instructional materials may aid a student in concretizing a learning experience so as to make learning more exciting, interesting and interactive. They are tools used in instructional activities, which include active learning and assessment. Global Dictionary (2019) The term encompasses all the materials and physical means an instructor might use to implement instruction and facilitate students achievement of instructional objectives.

Instructional materials can be classified on their types, which include prints, visuals, audiovisuals:

Prints	Textbooks, pamphlets, handouts, study guides, manuals
Audio	Cassettes, microphone
Visuals	Charts, real objects, photographs, transparencies

Audiovisuals	Slides, films, <u>filmstrips</u> , television, video, multimedia
Electronic Interactives	Computers, graphing calculators, tablets

2.5.9 The Importance of Instructional Materials in Teaching Language

The importance of instructional materials in teaching and learning cannot be underestimated. A lot has been written to show the indispensable role of materials in curricular implementation. Instructional materials make learning more interesting, practical, realistic and appealing. They also enable both the teachers and students to participate actively and effectively in lesson sessions. They give room for acquisition of skills and knowledge and development of self-confidence and self-actualization. Ibeneme (2000) observed that teaching aids are important for practical and demonstration in the class situation by students and teachers. Ikerionwu(2000) saw instructional materials as devices that assist the teacher to present a lesson to the learners in a logical manner. In his own perspective, Fadeiye (2005) saw instructional materials as visual and audio-visual aids, concrete or non-concrete, used by teachers to improve the quality of teaching and learning activities. Agina-Obu(2005) submitted that instructional materials of all kinds appeal to the sense organs during teaching and learning. Isola (2010) also described instructional materials as objects or devices that assist the teachers to present their lessons logically and sequentially to the learners. Oluwagbohunmi and Abdu-Raheem (2014) acknowledged that instructional materials are such used by teachers to aid explanations and make learning of subject matter understandable to students during teaching learning process. Abdu-Raheem (2011) asserted that non availability and inadequacy of instructional materials are major causes of ineffectiveness of the school system and poor performance of students in schools. According to Abolade (2009), the advantages of instructional materials are that they are cheaper to produce, useful in teaching large number of students at a time, encourage learners to pay proper attention and enhance their interest. Isola (2010) also described instructional materials as objects or devices that assist the teachers to present their lessons logically and sequentially to the learners. Oluwagbohunmi and Abdu-Raheem(2014) acknowledged that instructional materials are such used by teachers to aid explanations and make learning of subject matter understandable to students during teaching learning process. Kochhar (2012) supported that instructional materials are very significant learning and teaching tools. He suggested the need for teachers to find necessary materials for instruction to supplement what textbooks provide in order to broaden concepts and arouse students' interests in the subject.

Afolabi and Adeleke (2010) identified non-availability, inadequacy and non-utilization of learning materials as a result of teacher's poor knowledge as factors responsible for the use of lecture method. They recommended that both the students, teachers, parents, Parents/Teacher Association, government and philanthropists should be involved in improvising instructional materials for the teaching and learning in schools. Therefore, Ogbondah (2008) advocated for of

teachers' resourcefulness and also encouraged them search for necessary instructional materials through local means to supplement or replace the standard ones. Oso(2011) also agreed that the best way for teachers to make use of their manipulative skills is to improvise so as to achieve their lesson objectives at least to a reasonable extent. Jekayinfa (2012) also identified the importance of instructional materials as making learning concrete and real, substitutes one thing for another, allows the students to participate in the production of materials, economical and more teacher-student resource oriented. Abdu-Raheem (2014) submitted that improvisation of locally made teaching aids could assist to improve quality of graduates turn out from schools and standard of education generally. Abdu-Raheem and Oluwagbohunmi (2015) also corroborated the idea that resourceful and skilful teachers should improvise necessary instructional materials to promote academic standard in Nigerian schools.

Chapter Three

3.1 Research Design and Methodology

3.1 Study area and period

The study was conducted in Ethiopia and it embraced three areas namely: Addis Ababa, Hossana and Hawasa from 2018 – 2019 GC. These three places were selected for this study as country level because, there are Schools facilitated for a Deaf Learners in these areas.

3.2 Study Design and Methodology

Gall, Gall & Borg (2009) defines research methods as sound plans for selecting research sample, collecting data and analyzing data. If the plan is faulty, 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 Ethiopia, to save its complexity, I had to make a decision to adopt a design that would give a deeper understanding of the subject-teaching the learners how to read

and write. 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 teaching reading and writing and learning processes 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).

3.3 Population and Sample

The target populations were teachers and the head teachers, in primary schools for the deaf which were purposefully selected based on availability and their characteristic from three different areas of Ethiopia i e, EECMY School for the Deaf in Hosanna, Bole Alpha Primary School for the Deaf in Addis Ababa and Church of Christ in Hawassa. Teachers of Grade 1-3 students were chosen for the study based on their willingness to participate in the research.

3.3.1 Selection of the Schools

All the schools selected were Government schools, supervised by the local Governments (Ethiopia runs a decentralized governance system). However, regarding the Supervision of Standards, the Central Government has a major stake, as it can register or de-register a school according to whether it does or does not provide educational services within the set minimum standards. The head teachers in all the schools that enroll learners with special educational needs (SEN) are hence expected to have been exposed to methods of handling such learners (Ministry of Education of Ethiopia, 2001). Primary schools that were directly engaged in enrolling and teaching learners who are deaf were selected to participate in the study. The sampled schools determined which regions were chosen and in this study, Central Regions and south west were used. I preferred to engage only three schools in these two regions, to keep the number small and to create a favorable condition for a qualitative study.

3.3.2 The Study Schools

The study took place at the time SEP(Social Educational Program) was holding the first training workshops for the teachers of deaf students, Head teachers, zonal and regional Education bureau officers at EECMY School for the Deaf , one of the sample school for the study.

I was called upon to facilitate for the workshop. Advantage of these workshops was taken; since they also included the head teachers and teachers that I had targeted; to introduce my study to these officers who had been invited for the workshop. At that time permission had already been secured from concerned bodies..

The study was introduced to them as planned. The researcher further shared how the study was intended to be carried out. The head teachers then proposed that the teachers in the given schools would be alerted of the exercise and each would provide an appropriate time for the exercise. His later visit to the district offices was more of a formality to report the start of the data collection. At the school level it was reported to the head teachers' offices for purposes of knowing that the programs would be guided by the head teachers. This included getting to know which classes and teachers to be included in the study.

3.3.3 Selection of the Respondents

The respondents were determined by the sampled schools. The head teachers of the selected schools were to be respondents; while the teachers engaged depended on the selection of the classes to be involved with informed guidance by the head teachers; given the criteria for selecting the respondents for the study. Two teachers per school trained as special needs teachers and teaching learners who are deaf in lower classes (primary 1- 3) were selected. All the teachers selected were teaching deaf learners and were trained teachers who had at least attended a refresher course on special needs education and particularly related to deafness. Two classes were selected in each school. The researcher had intended to use 6 teachers as respondents and their 3 head teachers. Regarding the teachers, much care was taken to make sure the right teachers were selected. Thus, the researcher had to note whether the teachers had been specially trained in special needs before and whether they had been licensed and appointed to teach. Since the data collection also involved observation and recording of what is going in the class room. Six teachers would be observed teaching although in one school two teachers shared a lesson which change the number of teachers from the initial planned number of six to seven teachers because the researcher found it important to include all the data. Furthermore the children were reported to have been enrolled from distant districts, This made it difficult for the parents to travel up to the place where the interviews were going to be held. I had hence to drop the idea of engaging the parents for the

interviews. He likewise had to drop the plan of interviewing the learners given that the few he encountered within the pilot study were hard for me to pick up regarding their way of communication and they seemed to be unable to answer questions even when I wrote the question on the paper. The children looked reserved and hesitant to open up, for reasons I couldn't readily fix.. Besides children at this level were not expected to questions included in the interview protocol.

3.4 Data collecting procedure

In this study, two methods of data collection were used: Interviews and Observation that solely employed post note taking to investigate into the teaching of reading and writing, factors and strategies responsible for facilitating reading and writing and 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 and Borg, 2003).

3.4.1. Interview

Interview was used to know the problems faced by teachers and learners during teaching and learning of reading and writing. It involves gathering information by talking directly to people-face to face, over the telephone, or via the internet.(Thomas,2005) Hence, in this research face to face interview was conducted with the teachers and the head teachers. A converging question strategy was followed during the interview. According to(Thomas,2005.PP.102) the dual intention of using converging question approach incorporates the advantages of both loose and tight strategies by the interviewer starting with a broad question designed to reveal what seems uppermost in the respondent's mind in relation to the topic at hand. Since a few number of respondents participate in the interview, the researcher got this type of strategy to be helpful to dig out as much information as he wanted from them pertaining to problems faced by teachers and learners during teaching and learning of reading and writing. For this purpose, he prepared interview guide-line that contained fourteen question each of which followed by probing questions. The interview process was tested out on a few individuals who didn't participate in the final set of interviews. Therefore, each of the teacher and the head teachers were given 14 interview questions. The interview guideline or protocol has been included in the appendix.

The researcher interviewed 7 teachers, three in one school, two in another and two more in the last one the researcher found it relevant to include the third teacher in one of the schools for the interview. I had planned to have only two teachers per school interviewed but during the study, The researcher was in one school, confronted with a class that had two teachers who taught the same lesson. One covered the teaching of the reading aspect of the lesson, while the other covered the writing aspect of the lesson. Many of these teachers had claimed to have done their scheming and lesson preparations together and were using the same lesson plan for teaching (giving room to a possibility of dropping one for the interview), The researcher chose to involve both the two teachers not only for purposes of complementing each other's inputs, but to be sure he took note of all the aspects of the lesson. He reasoned that it was possible for the two teachers had always shared their lesson in that format, hence the researcher had the option of choosing one of the teachers. School however, it was inevitable that the researcher engage three teachers instead of two as it was for the other schools, as explained earlier that the two teachers in turns shared the same lesson. They all taught aspects of the lesson which were all important to the study. The teachers had been assigned to teach in one class. The third teacher handled a lesson that covered the teaching of reading and writing. These gave two lessons observed in all the schools.

3.4.2 OBSORVATION

Observation was used to find out how reading and writing are taught to deaf students and to identify the strategies used in teaching reading and writing to these deaf learners. A postponed note taking technique was employed for the observation. “ Often it is either inconvenient or unwise to take notes while an event is in progress, so recording what occurred must be left until a later time” .(R.Murray Thomas,2005). As Thomas puts this technique has both disadvantage and advantages The disadvantage is that the researcher might forget significant details, the actual sequence of actions or important participants. Furthermore, the longer the interval, the more likely the researcher will write only a summary of the observed incident.-a recalled essence of the episode-rather than a detailed account. On the other hand, the two advantages of postponed note-writing are that (a)the researcher attention was not distracted by note-taking during the observed event and(b) more care can be taken later in phrasing the record than might be the case when the notes are written while an episode is in progress. Hence the researcher of the current research was doing the note-taking as soon as he carried out the observation to minimize the disadvantageous

of the technique. The observation took three weeks. Each classroom was observed at least twice since there were only one section for each grade level in the deaf schools.

3.6 The Interviews With the Teachers

Although the researcher had earlier discussed with teachers in the head teacher's office, regarding the interviews, it was important to me that I went through again what I was expecting of the teacher. This was necessary to remind the teachers that this was for the study purpose and to continue to build rapport with the teachers (Gall, Gall, & Borg 2009). While conducting the interviews I had to be sensitive to concerns raised by the teachers of the pilot school regarding my personality. I was also cognizant of many aspects for effective interview management in the Data Field Guide as agreed to by Marshall and Rossman (1999) and Gall, Gall and Borg (2009). These included introductions, clarifying the duration of session, clarifying guidelines such as keeping responses confidential; and encouraging positive perspectives; while pointing out what could be negative. It was important for me to ask questions according to the guide. Whenever there was a need to probe, this would be done within the context of the study. Where the participant alluded or volunteered information that matched with the questions that were to be asked, this question would not again be asked, as the information would then have been received.

When I did not understand a response I would ask for some clarification from the respondent. I found it productive to thank all the participants at the close of the interview session. As much as possible I avoided getting personally involved by way of engaging in personal disclosure, to avoid influencing the responses of the participants and hence impacting negatively on the study, because the respondents could be tempted to consider my point of view (Gall, Gall, & Borg (2009).

3.7 Interviews with the Head teachers

The interviews with the head teachers basically followed the same format as that which was used for the teachers. The only little difference was that the head teachers focused their responses towards administrative aspects, tending to make me appreciate the managerial aspects of managing special needs education services as very critical

Chapter Four

4. Data Presentation and Analysis

The data is presented following the critical components that form the body of any classroom teaching/learning processes/lessons. The researcher used these components to develop the themes/categories for data analysis. These include the educational technology theme or “foolproof materials” that are crucial in the teaching (Lovel & Wiles, 1975); the teachers’ methodology theme, that is argued to engage high levels of creativity, sound judgments (professional) and insights- a coordinated move likened to the Symphony conductor (Eisner, 2010) and the teaching/ learning process feedbacks, that are provided through the learners’ activity/assignments. Davis (1997) argues that there can never be any teaching without the learners. Another theme was that which encompassed the Setting/Environment in which the learning takes place. The researcher chose to specifically provide another component as regards the “teacher movements” but only to be used for the data collected through the classroom lesson observations; as recorded by postponed note taking .(R.Murray Thomas,2005). It was important to consider teacher movements as it directly impacts on the signing space and signs, as for those who use sign language. The researcher has chosen to discuss each theme across the data collected from the respondents and the lesson observation. The intention is to provide a clear picture of how each theme performs across the board. In the discussions, I have chosen to represent the teachers with the symbol Tr. Regarding the teachers who shared the class and the lesson,

they share the same number but with the second teacher assigned an additional letter “b”. The researcher assigned the head teachers the symbol Htr.

4.2 Head teachers and Teachers from Three Schools

This study had only three head teachers as respondents. For ethical reasons and the purposes of the presentation the researcher has omitted information about which teachers or head teachers belong to which school. He has hence used the symbol Htr. to represent the head teachers and Tr. to represent the teachers. None of the head teachers had been trained to teach learners with special learning needs but had long years of experiences as head teachers in the schools for the deaf. Likewise, not all the teachers had formal training in teaching learners with special educational needs but had taught the deaf in the schools for several years. They also did not have similar training in teaching the deaf to read and write. Tr.5 and Tr.6 had taken training in Special Needs Education (SNE) at University. Tr.2 reported that she was hard of hearing (hearing impaired) and had only learned sign language through interface with other deaf persons. Tr.1 was undergoing her training in SNE at University (on internship) but for a Diploma award in SNE. Tr. 3 and Tr.4 had only attended some seminars on special needs education. What was common to all the teachers, however, was that they were all trained to teach at the Primary schools level (grade III).

These schools in connection to the children's education encounter a challenge in enhancing the reading and writing learnt at school. When I asked about the parent support, Htr.1 had the following to say:

"Parents just bring children here without any support. Some children are neglected and we have even to use our own money to buy them pencils. If a parent says he doesn't have anything you can't neglect the child".

4.3 Teaching Materials

The evidence obtained from classroom observation, all the 7 teachers were using instructional/teaching materials for teaching reading and writing. The prominent method among the methods reported was the use of real objects; cards; charts; pictures; drawings; reading materials; the blackboard itself; the curriculum materials and teacher made materials. Specifically Tr.1, following prompting by the interviewer, explained:

"First of all, like now you a teacher, you have, to have pieces of chalk, blackboard. Learners must have pencils and books, we also have the teacher's Guiding book for reading and writing, that is a text book." I probed to know whether they had any other equipment, upon which she added: *"Text books, are they not materials?... we follow the curriculum book".*

4.4 The lesson Observations

Lesson observation was carried out in order to answer the second research question and the third research questions.i.e. to know how were reading and writing taught to deaf students and what strategies were used in teaching reading and writing to deaf learners . The lesson observation in order to know how reading and writing are taught to deaf students . It took the researcher three weeks. Each section was observed at least twice.

All the 7 teachers who were observed teaching used various instructional media. This included Signed English, and total communication. They also used teaching aids like the cards, real objects, and charts and pictures. Tr.1 engaged the blackboard and the drawings. Tr.2 used the blackboard which was partitioned into two sections; one was for use while teaching the learners reading and the other for teaching the deaf learners how to write. Each word that was taught would first be signed, and then written on the blackboard. One boy/learner was once called upon to write on the

blackboard.Tr.2 also used a chart with drawings of birds. The learners were required to provide sign names of the birds pointed at on the chart by the teacher. Tr.2.b who took over the lesson from Tr.2 continued to use the blackboard but in the section which had been marked for teaching writing. She also used the top of the learners' desks which learners used to practice writing the letters. Finally the pupils used their writing materials (pencils and exercise books) to do the exercise on writing, given by the teacher.Tr.3 had a combination of several other materials. The instructional materials used included the use of cards which had different sizes of letters. Some were written in upper case letter while others were in lower case letters; each card was shown to the learners and they wrote the letters in the air. Other cards were of drawings of objects to be taught, for example the shorts, the sun, and the snake. She showed the card to the pupils and follow it up with signing the sign name for that object drawn in the card. As was the case all Tr.4, Tr.5, Tr.6 and Tr.7 had blackboard, divided into two sections.

4.5 Conclusion on Instructional Materials

All the teachers were enthusiastic to use instructional materials and often engaged the learners in the use of the instructional materials; when explaining concepts/words. Children were, for example, often called upon to write words on the blackboard. The researcher generally observed that these instructional materials were used to facilitate learning to read and spell words and also learning writing as children read out the words or sentence copied or drew patterns of the letters let alone wrote sentences using the words. The materials were also used to introduce the meaning of words or to teach the concept. Real objects directly provided the meaning, clearer and quick understanding of what was being taught.

The common teaching/learning aids engaged by all the teachers as demonstrated by the data from observation included blackboards that were used both by the learners and the teachers, cards; real objects: charts; drawings and the exercise books. The researcher observed that the use of real objects appeared very instrumental in triggering natural learning and facilitated faster learning. The learners actively, and with interest, explored the materials and spontaneously provided responses regarding the objects, when asked about them. Several real objects such as stones and sand were used by Tr.3 for the learners to feel their texture, weight and hardness.

4.6 Teachers' Methodology

This section of the study was specifically designed to contribute to answering the research questions on what strategies were used in teaching reading and writing to deaf learners; on what problems were met during teaching/learning to read and write; and on how much time the learners took to learn to read and write.

4.6.1 The lesson Plans

The tool used here is observation and the intention is to find out the teaching methods and strategies followed by the teachers to teach reading and writing to the deaf learners. So the observation result showed that all the lesson plans of the teachers were similar to one another in terms of the format. According to what is indicated in the lesson plan format, the methods that the teachers used included demonstrations, illustration, observation, explanation and the whole word method. Specifically Tr.1 had only demonstration and illustration; Tr.2 had demonstration and illustration, Tr.2.b had demonstration, illustration and observation; Tr.6 had observation, illustration and demonstration. Tr.3, Tr.5 and Tr.6 were the only ones that named the “whole word” method in their plans. All the lessons had the lesson content as “Reading and Writing” and the competencies to be taught as “reading names of things” (such as soap, salt, pencils, maize, stones, and sand) and “finger spelling”. Tr.3 and Tr.4 also indicated matching of words as competencies to be learned. The blackboard illustrations, charts, cards and the use of real objects (for example stones and sand named by Tr.3; buckets, plates, clothes named by Tr.6) were among the materials indicated in the lesson plans, as learning Aids (instructional materials). For all the lesson plans, it was indicated that the learners would sign the words, finger spell and write patterns in their exercise books. Tr.5, for example, indicated in her plan that writing would be initially introduced by writing of patterns of the letter “S” that the pupils would later be led to write in their books. I observed that all other lessons that had earlier been taught by all the teachers had had the same pattern; with Tr.5 consistently naming that she would use the “whole word method”.

4.6.2 The lesson observations (observation on use of the methods)

A postponed note taking way of recording was used for the lesson observation. According to Thomas (2005) Postponed note taking is carried out when it is often either inconvenient or unwise to take notes while an events is in progress. Tr.1 used the Ethiopia sign language for the instruction. She energized the class at the start of her lesson by making them jump. While teaching the concept „birds,“ she signed the sign names of birds (the hen, turkey, duck and pigeon). For every word she taught, she wrote the whole word on the blackboard followed with a sign.

Then she picked a small boy who was at the back of the class and apparently uninvolved in the lesson. The boy was later shifted to sit at the front and made to respond to some questions. She introduced the new words as a whole (not broken into phonemes) with the help of drawings of birds. Tr.2.b handled the same lesson as Tr.1, but only the writing aspect, and basically used the same approaches as Tr.1. She exploited the “demonstration” method but with support of the use of sign language. These hand movements and hand positions were intended to help the children see the hand movements involved in forming the letters. Tr.2.b introduced writing by writing patterns using letter “e”; an exercise all children did by first writing the pattern in space and finally in their exercise books.

Tr.2’s and Tr.3’s methods of teaching writing differed in that Tr.2 demonstrated how to form letters by writing in space and facing the blackboard (helping learners to see how to form the letter shapes); while Tr.3 never demonstrated in space. She went straight to demonstrate on the blackboard how to write letter “S” (with some being called upon to write the letters or patterns on the board) and later a pattern using the letter S, and thereafter writing words that had the letter S, for example „Sand“. Tr.3 would talk for some time then keep quiet, sign without talking, then again begin talking while signing. As was the case for Tr.1 and Tr.2, Tr.3 taught the words as a whole, with support of the instructional materials such as stones and sand.

Tr.4 employed similar methods to that wereused by Tr.3. She however exploited flashing the cards and having the learners spell out the words/letters by use of finger spelling and signing and sign names. She also engaged the learners in using their learned experiences/ knowledge by asking for any words that children knew of and that started with letters they were being introduced to, in class.

Tr.5 and Tr.6 had a unique aspect, much as their method was similar to their colleagues' approaches. These two teachers, who also taught in the same school, used sign language as a medium of communication but with limited spoken language. Their lips/mouths would form shapes that would suggest some words but without any sounds being made. They, too, taught the reading and writing of words and sentences as a whole. Tr.6, however, was quite slow in her signing as compared to all the other teachers. As a group, I observed that Tr.1, Tr.3 and Tr.4 used motivation/rewards and energizers to keep the learners focused and learning.

All the 7 teachers exploited their interpersonal relationships with the learners. David Bloome (1985) described reading as a social process involving relationships between individuals. These relationships range from those among students, between students and teachers, between parents and children, and among authors and readers.

4.6.3 Teacher Movements

All the 7 teachers made some movements while in the class. The data reveal that teachers' movement was confined to the front of the class except when providing specific support to individual learners. The teachers looked at the learners directly in the faces and only turned their backs to the class when writing on the blackboard and when demonstrating writing in the space. Occasionally the teachers would move to the learners that had been picked to respond to questions or who were to be picked to respond to questions. Specifically, Tr.1 was confined to the right hand corner and at the front of the class throughout all her time of teaching. Since her class was small in size, this might have had no impact to the teaching/learning processes. Tr.2, like Tr.2.b, moved all through the class when there was need to attend to learners. Tr.3, on the other hand, was confined only to the right hand corner. Tr.4, Tr.5 and Tr.6 were confined to the front while teaching the whole class, but moved to individual learners later to provide individual help. The researcher observed, however, that whenever the teachers made any movements, they also attempted to maintain some eye contact with the learners they were targeting. The teachers' movements suggested that they were making attempts to get closer to the children and certainly to make sure they were understood. Their movements were also accompanied by a lot of facial expressions and gestures, a necessary component for sign language.

4.6.4 Learner Activity

Consideration of the learners' activity specifically contributed to answering the research questions on the strategies used for teaching reading and writing; how much time the deaf learners took to learn reading and writing; the problems met in the learning process.

4.6.5 Lesson Observations

Activities named by the teachers as those the deaf learners went through during reading and writing lessons, tallied with those observed during the lessons. The data demonstrates that all the teachers engaged the learners in the teaching/learning activities in one way or another. The activities to do with writing always followed the reading activities. Likewise these were first demonstrated by the teachers and later followed by the students. The common reading activities the researcher observed being done included sign naming; spelling, matching the words with pictures or sentences with pictures; completing the naming of cards written with missing letters; naming of objects drawn on cards and forming simple sentences using the learned words. The writing activities included writing in space to enable children to appreciate the shapes of letters; writing on the blackboard; drawing; writing letters and patterns in the exercise books and writing simple sentences.

4.6.6 Setting/Learning Environment

The learning environment specifically refers to how each teacher designed/arranged his class in readiness for and during the teaching learning activities (Miller and Cunningham, 2003). It also had aspects of the space used in the classrooms, seating arrangements, and the movement space. The class and the teacher hence required to be positioned in such a way that they all clearly saw the signs either of them was using. During the Classroom observation the researcher noticed that all the 7 teachers used the same sitting arrangement and patterns. The desks, on which the learners sat, were arranged in rows. There was also space left in between the rows for teachers' or pupils' movements. On the walls were a number of charts with drawings. All the teachers, when asked about the importance of the charts on walls answered that it was for the children's learning while at their leisure time. Since these charts had equally some labels and writings on them; I concluded that the children were also learning to read by reading the writings/labeling on the charts.

4.6.7 Teacher Perceptions

The teachers' perception of the learners is very crucial in guiding them regarding the choice of methods to select/use. Interview was used for identifying their perception. The teachers

unfortunately had a low opinion regarding the learners with deafness as a result as they think their deaf learners like slow learners; not readily able to learn. The teachers all cried out on lack of instructional materials; some of which they could have made themselves using the local available materials (often in the environment-communities). Hence, the researcher was forced to think that the teachers were either not committed to their work (though it would not be possible to have all the teachers not committed) or were just ignorant of what they should have done as creative teachers.

Chapter Five

Discussions and Conclusion

5.1 Discussion

5.1.1 What strategies are used in teaching reading and writing to deaf learners?

In this regard, the findings indicated that teachers use a variety of methods to teach learners who are deaf how to read and write. Among other, they include; demonstrations, illustration,

explanation, and sign language. The most common strategies used by teachers were sign language and demonstration. The teacher's approaches relate to what is reported in previous studies (Dominguez, 2009). In spite of their engagement in the teaching/ learning situations, analysis demonstrated that the teachers' understanding of methods was inconsistent. While the majority reported to be using a variety of method as in teaching of reading and writing for learner who are deaf, evidence from observations shows the contrary. Three categories of teachers immerge from this finding. This means that although the teachers were not doing what they were supposed to do, at least some were aware of what methods they had touse while others were not aware and did not do. The educational implication of this finding is that, there is great need to counsel teacher's conceptual knowledge with regarding strategies. This finding is consistent with Perrot's arguments that "method", "technique" and "strategy" were often loosely used by teachers to mean ways of teaching. He observed that these concepts referred to different though related activities.

The teachers' limitations on how to tap the potential of other specific strategies/methods in teaching reading and writing was evident in the results. For example, the learners were made to look at pictures, visually explore objects and to read cards or match them. The use of vision appeared to be based on a belief that once the learners saw the materials then they would easily be able to perceive and understand the concepts taught. The importance of visual performance especially in relation to phonological awareness (as a method) was not exploited. Cunningham & Allington (1999) explain phonological awareness as the ability to isolate individual sounds (phonemes) in spoken words. This process facilitates connecting sounds with letters, decoding words and deriving meaning from print. The use of this method is also applicable with the use of sign language (Brunet, 2010), as the Ethiopian Sign Language also exhibits variations at the phonological level and mostly in the hand shape parameters, variations of which are mutually intelligible (Lule et al, 2001, in Ethiopia Sign language Dictionary ,2006). Similarly the learners were made to read or write words without understanding the roots.

Evidence from the observations demonstrates the teachers presented concepts to be learned as a whole word. New words and sentences were either written out on boards, cards, or blackboards and were taught exactly as they were. There was no splitting or subdividing of the words into smaller parts guided by the sounds/phonics or otherwise. Even where the learners were to fill in missing letters, words or sentences, as exercised by Tr.3, Tr.4 and Tr.5, this did not follow any

sound patterns or phonemes. Learners were hence expected to sign whole sentences or words and to provide meanings of the words. This method is characteristic of the whole sentence/word approach of teaching reading. Beck & Juel (2002) refers to the whole word approach as a method to teach reading by introducing words to children as a whole unit without analyzing their sub parts. This method involves teaching children to “sight read words”. This means pronouncing a whole word as a single unit (Mayer, 2003).

For the case of the learners who do not hear well enough to benefit fully from spoken language this will require signing the whole word or providing the sign name or signs of the words. Although the teachers used this method, they appeared not to have been aware of it, except for Tr.3 and Tr.4, who said that they were actually using the method. Mayer (2003) further reveals that the whole word approach has been transformed to the whole language approach. The approach involves language being learned as a whole; learned with meaningful and relevant text. This would include reading and writing being handled at the same time. Although the teachers may not have been aware of this development, they all treated reading and writing within one lesson. Probably this was done because the timetable and the curriculum required so. One needs to examine the use of the curriculum in primary school in Ethiopia.

Tr.5, appeared to operate at a fairly uninformed knowledge base, regarding the nature of languages. She claimed that she signed in English to the deaf but had them do/copy the work which was in the local language. I found this as somehow confusing to the learners. The English sign language or the English language does have its own structures typically different from any Ethiopian local language. The unresolved question of what language to be used by the teacher/ the school in an inclusive setting became paramount. Given that the ministry has prescribed that the local language is used at this level. It was of interest to discover why school/teachers had chosen not to use the Ethiopia Sign Language. It was evident from observations that there was a mix up on what the teacher called the „English sign language“ and the local language.

5.1.2 How are reading and writing taught to deaf learners?

5.1.2.1 Instructional Materials

Instructional Materials are regarded as forms of communication. These materials should be selected and used in a manner that is effective for persons with disabilities and in this case for learners who are deaf (Uttal & DeLoache 2006; Reubell, 2011).

According to the results, teachers used a variety of instructional materials including; real objects, chalkboards, classroom furniture, pupil's exercise books, charts and flashcards. Used as a support to the teacher's methods in teaching the deaf learners to read and write were either introduced before the new words were taught or were used during the teaching to convey or consolidate the concepts learned. Although the use of these instructional materials varied in use by the teachers, they presented a similar pattern of use. This has potential impact on how well the learners may master the skills of reading and writing. As indicated in the results, some learner lacked adequate monitoring from their teachers. An example of this scenario is where in one of the classrooms, one of the three learners had no writing materials ; suggesting that the teacher did notice that one learner lacked an exercise book and pencil. There is no way a deaf learner, just like all other learners, would have learned how to write without the relevant materials (Good and Brophy, 2003).

Tr. 5 teaching raised a number of other related concerns in connection with methods of lesson evaluation/assessment; developing the lesson; seeing to the whole learning and teaching processes in teaching reading and writing and sensitivity to what was going on in the class. One was also inclined to question her knowledge of the value of instructional materials. A valuable opportunity of a one to one interface (Krashen, 2003) with this very small number of learners with hearing impairment in this class was not exploited. This incidence explained the level of support (a relevant condition for learning) the parents gave to their children while at school. For this particular girl, the parents or her guardians clearly had little concern regarding this girl's education; let alone learning to read and write. They should at least have been able to provide some exercise book to write on; given that an exercise book does not cost a lot to procure in Ethiopia. Even the poorest person with a family in Ethiopia should be able to find means of acquiring it. This specific observation on the parent support corroborates with the information provided by the teachers and particularly Htr.1 who emphasized this weakness.

The researcher noted that the teachers appeared to have mixed concepts about instructional materials, and levels of operation. Tr. 1 and Tr. 2, for example, did not even highlight what they had just used as instructional materials. Much as the teachers could be engaging some materials in either preparation or teaching/learning processes, it appeared they hardly considered them as serious instructional materials. One teacher out of the 7, for example, included curriculum materials, while the blackboard featured more among the materials named. It was interesting to note that no teacher mentioned anything regarding adaptations of or the use of adapted teaching aids

Evidence, too, suggests that Htr.1's focus on the materials/equipment was fairly misplaced. His understanding/belief on the learning materials was biased towards procured materials. Htr.1 even remarked that they hadn't received any materials from the Ministry of Education for long and they had been neglected; creating several challenges/problems in the teaching of reading and writing, as claimed by both the teachers and the head teachers. This apparent attitude and concept of materials for these learners by the head teachers could have resulted into the teachers claiming that they lacked materials. The head teacher is the first supervisor and motivator in any learning process. Htr.2, too, on the other hand was seen to emphasize the need for procured materials, whereas teachers had been trained on how to make some use of local materials; given that Ethiopia, like many developing countries, faces a scarcity of resources to meet all the required needs.

5.1.2.2 Teacher Movement Patterns

Class room management one of the responsibilities teacher, without it he can't teach his or students properly. So, to do this the teacher, instead of being positioned in one place he/she had to go round the class to control the activity of the students as well as to create intimacy with the his/her students.

As indicated by the data, the teachers made most of their movements at the front of the class. This only changed when they moved round the class to support individual learners. In general movements served as a technique to support the teachers' method of work. Naturally these movements draw the learner's attention to focus where the teacher is positioned and also indicate to the learners that specific attention is required of them (especially if made towards the learners). Thus it was surprising, then, that Tr.1 and Tr.3 were confined to specific positions. This raises the question of the teachers' understanding of the role of the teacher's movements in class. Much as sign language requires one to squarely be seen by the person being communicated to, this is not tantamount to being fixed to certain positions. On the whole, the teacher movements did not interfere with their signing, an aspect that is critical to the instruction.

5.1.2.3 Learner Activity

As observed in the data, the teachers were conscious about participatory learning. The learners were engaged in a number of activities that led to the practice and learning of reading and writing. Most of the activities called for both the teacher's and pupils' involvement and were directly related to learning to read and write, providing an opening for language accessibility and hence language acquisition (Briggle, 2005, Marschark, 2001). This would enable structuring of teaching and learning (Ramsey, 1997). I however did observe that the teachers hardly exploited the presence of other learners in the class. All through the learners got involved in individual learning activities other than group or even pair and share methods; as would be productive for language learning (Krashen, 2003). Vygotsky's (1978) reminds us that the children's ability to learn depends on external supports. He observed that the learning processes could only happen when the learner is interacting with people in his environment and in cooperation with his peers

5.1.1.3 Learning Settings/Environment

As indicated in the results chapter, the seating arrangement in these classes all had the traditional patterns where the learners sat in rows, while facing the teacher. While this was suitable for the teachers' communication to the learners (Ethiopia Sign Language Dictionary, 2007), It was apparent that this setting could have been altered to encourage a more interactive atmosphere during the exercises (Krashen, 2003). Those who sat in different rows had limited visual access to each other's utterances let alone the facial expressions and the signing. It however appeared to that the teachers were not conscious enough of the need to plan for the learning environment to promote or enhance the learning of reading and writing. What teachers planned and used for all lessons were the instructional materials. Other aspects of the settings or environment such as writing space for both the teachers and learners; ascertaining the availability of the pre-reading and writing skills before engaging the learners in the reading and writing activities; looked out of reach of the teachers approaches. For examples observation data showed that one teacher (Tr.1), who could not use the blackboard effectively, while another teacher (Tr.5), who gave out a writing exercise without first ascertaining that all the learners had the writing materials or other learners' readiness attribute

5.1.3 What are the problems faced by teachers and learners during teaching and learning of reading and writing?

In response to this research question, the findings reveal that the teachers perception of the factors influencing teaching/ learning processes was affected by the nature of their understanding of the learners and the provisions made to support the teaching. This was characterized by the challenges the teachers named, that depicted lack of support services and other relevant tools/ materials to be used by the teachers and the learners. It is not surprising that the teachers and head teachers except Tr.2 claimed that most of the pupils were slow learners and hence limited the kind of “methods” they used for teaching reading and writing. Tr. 2’s response was unique and informing. This too demonstrated the attitude of the teachers towards their learners and also their inability to appreciate the learners’ learning challenges; save the ability to use and having the knowledge of which methods to use for such learners. This claim does not reflect the normal curve (expected of any group of performers), where the majority of learners would be expected to fall at the centre of the normal curve (Normal Curve, 2011).

5.2 Conclusion

The aim of study was to understand how reading and writing was being taught to the deaf learners in Ethiopia with an aim to generate information that could be used to modify existing practices for the benefit of such learners to the optimum from their schooling that their performance has continued to be very low. The Examiners too believed that their poor performance was related to their proficiency in reading and writing levels. Data collected through the 7 video recordings were treated with comprehension and categorized. Regarding the question on strategies for teaching reading and writing, my findings indicated that the teachers taught reading and writing within the means and resources at their disposal. Much as these schools had some differences in levels of

resourcing and location (urban verses rural), their methodology and understanding of the teaching of reading and writing to the deaf were typical of one another. Findings indicated that the teaching of reading and writing to the deaf followed the whole word/sentence approach. They also heavily relied on the instructional materials at their disposal during the teaching/learning processes. The teachers all equally used several approaches to teach deaf learners. These included a combination of the approaches in teaching the deaf; of oral approaches; signing/ using sign language; but with insignificant use of the contemporary approaches. Lip reading was also named used by one teacher but was however not actually followed during the observed lesson time.

Based on the findings, the teachers did not either pay critical attention to the methods themselves or lacked comprehensive facts of what constituted the methods for teaching reading and writing (let alone their use); as portrayed by the interviews and the observations/recordings. The teachers named all that they did and presented these actions; such as demonstrating, illustrating, observation as 78 Methods- though three of them also mentioned the whole word as a method. The head teachers provided supervisory support within their perceptions. Findings also demonstrated the understanding of instructional materials used for teaching, by the teachers, as wanting. Much as they had so many instructional material that they had made, they still cried out that lack of instructional materials was one of the challenges.

The attitude of the parents regarding supporting their children to learn to read and write, for example, required to be attended to, given the lack of interest and commitment on their part; as reported particularly by the head teachers. The findings revealed that the parents had very limited inputs and in most cases were reported to lack in supporting their deaf children to learn. One could too argue that the parents or the guardians may just not see that value in educating these deaf learners. Most homes in Ethiopia take their children to school as an investment. On completion of schooling and attaining some job, one is expected to provide for the family or support his/her sisters or brothers too; through the same or similar systems. It would be hard for some families to believe that investing in such learners could yield the same or similar dividends. Regarding teachers and challenges, Summarizing all this ,the researcher concluded that much as there was considerable effort on the part of teachers to teach reading and writing to deaf learners, it was clear to me that there was need to revisit the programs and methodologies regularly (including understanding the learners); which looked was not the case then. This would involve interface with the parents given that the children at certain times of the year also stayed with their parents (for those in boarding schools) while those in day schools spent much of the time with parents. Similarly the head teachers needed to be more pro-active. Much as they demonstrated

Recommendations

The study set to find out how reading and writing was taught to the deaf learners. in primary scschool Apart from the main findings of the study, other related concerns that affect the teaching/learning processes, and that require attention, got revealed. Since it shall not be possible to address all of them here, specific ones with related recommendations shall be highlighted as follows:

- 1) Universities and Colleges should make sure that their trainee teachers are equipped with the necessary teaching methodologies suitable to teaching reading and writing to Deaf learners..
- 2) Further in-service refresher courses or re-training relevant to teaching reading and writing to the deaf should be organized by the Ministry of Education of Ethiopia for Supervisors (head teachers and the Inspectors of schools) need to attend these courses.
- 4) A comparison between the ways the teachers who are hearing impaired teach the learners who are deaf and that of the teachers who are not hearing impaired should be studied further. .
- 5) Teachers should use varied techniques or method suitable to teach reading and writing to learners who are deaf.).
- 7, Responsible bodies should make sure instructional materials such as textbooks are delivered to this special need schools.
- 6) Further wide and intensive research should be conducted on teaching and writing to the deaf in Ethiopia.

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Appendix 1: Guiding Question for Interviews

1. How much time do you use per lesson?
2. What is the language background of children you teach i.e. first language?
3. What language did the deaf children have before they came to school?
4. What language do you use when teaching the children with deafness?
5. How do they learn to read and in what language?
6. What materials, equipment etc. do you use when you are teaching to read and write?
7. How do you decide on what they should learn and what programs do they follow?
8. What specific methods do you use for teaching reading and writing to the deaf children?
9. What challenges do you meet teaching reading and writing?
10. How do you know a child has learnt to read and write?
11. What time in life do the deaf learners begin to read and write?
12. At which level do you begin to teach the deaf child to read and write?
13. What are the conditions that enhance the reading and writing ability for deaf learners?
14. What contribution do the parents provide for reading and writing to the learners? 98

Appendix 2 : Guiding questions for Head Teachers

1. What kind of materials do you give to your teachers for teaching reading and writing?
2. What programs do you follow in your school (curriculum)?
3. What language do the teachers use for instruction?
4. How do the children communicate to/with the teachers and their peers?
5. Who provides the material/equipment that is used for teaching reading and writing?
6. What kind of in-service training are the teachers given by Ministry of education to enhance teaching reading and writing to Deaf children?

Appendix 3: Guidline questions for observation

The following questions served as a guideline by the researcher to focus onhis observation:

- 1. What are the stratagies used by the teachers in the classroom to teach reading and writing to the deaf learners?**
- 2. What are the instructional materials employed by the teachers in teaching reading and writing?**
- 3. How are the teachers' movements patterns as they are delivering the lesson.**
- 4. How is the learns participation encouraged?**
- 5. What does the learning setting/invironment look like?**