

**EXPLORING THE USE OF SIGN LANGUAGE AS A MEDIUM OF
INSTRUCTION FOR LEARNERS WITH HEARING IMPAIRMENTS (HI)
(DEAF OR HH) IN SPECIAL AND INCLUSIVE PRIMARY SCHOOLS IN
MALAWI**

M.Ed (PRIMARY- LITERACY) THESIS

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DECLARATION

I, the undersigned, hereby declare that this thesis is substantially my own work which has not been submitted for any other award at the University of Malawi or any other University. Where other peoples' work has been used, acknowledgements have been made accordingly.

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CETIFICATE OF APPROVAL

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DEDICATION

This dissertation is dedicated to my beloved children: Dan, Memory, Jane, Angella, Greyson, Ellen, and Isabel Idah. My adorable grandchildren: Eric, Brian, Lance Glenn, Laureen, Leon, Glenda, Nohakelha, Lawrence, and Charlene for your support, encouragement, patience, and love during the time I have always been away from home. You all missed my love and care when you wanted me to be close to you but you persevered all the hardships you underwent during my absence and failure to visit you. To my sister and brother: Catherine and Isaac, for all the support and encouragement. My longtime friend and love Mack, sister in-laws; Emmie and Chrissie, my friends; Brown & Anna Malikete, and Marieke, for all your support and words of encouragement. You all were my source of encouragement and strength. To my late mum and dad as I know that you are smiling wherever you are resting awaiting our reunion. I just wish you were here to witness my graduation but God had other plans.

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ABSTRACT

Language determines the performance of learners in all subjects in the curriculum as all learning areas require the use of language. As such, it is imperative that teachers use the language that learners with HI would understand. This study explored the use of SL as a medium of instruction for learners with HI (deaf or HH) in one special school and one inclusive primary school in Malawi. The study investigated how teachers in both schools use SL to effectively communicate with their learners during the teaching and learning process. Based on an interpretative paradigm, the study adopted qualitative research methodology to explore the issues at hand. The semi-structured interviews and classroom observations were used to generate data. Data were analyzed using thematic analysis. Generally, the findings revealed that some teachers in special schools had problems to effectively communicate with learners with HI because they lacked training in using SL as a medium of instruction, whilst in inclusive schools, mainstream teachers lacked knowledge and skills in SL. The thesis concludes that although the learners with HI were included, practically they were excluded in the teaching and learning process. It is therefore recommended that all teachers must undergo training in SL so that they can effectively teach and communicate with learners with HI in both school settings. This implies that the knowledge and skills that the teachers will acquire will enable the learners with HI reach their full potential in education.

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LIST OF ABBREVIATIONS AND ACRONYMS

CCAP	Church of Central Africa Presbyterian
DEM	District Education Manager
EFA	Education For ALL
EMIS	Education Management Information System
FEDOMA	Federation of Disability Organizations in Malawi.
HI	Hearing Impairment
HH	Hard of Hearing
LD	Learning Difficulties
MACOHA	Malawi Council for the Handicapped
MANAD	Malawi National Association of the Deaf
MANEB	Malawi National Examination Board
MSL	Malawian SL
NAD	National Association of the Deaf
PCAR	Primary Curriculum and Assessment Reform
PSLCE	Primary School Leaving Certificate Examination
SEN	Special Educational Needs.
SL	Sign Language
SNE	Special Needs Education.
ToD	Teacher of the Deaf.
UNESCO	United Nations Education, Scientific Organization
UNFPA	United Nations Population Fund
UPE	Universal Primary Education
WFD	World Federation of the Deaf

CHAPTER ONE

INTRODUCTION

1.0 Chapter Overview

This chapter provides a brief background to the study on the use of Sign Language (SL) in the teaching of literacy and language to learners with Hearing Impairment (HI), Deaf or Hard of Hearing (HH) in Malawian special and inclusive primary schools. The chapter further describes the statement of the problem, and the purpose of the study. It also outlines research questions, significance of the study, limitations of the study and definition of terms. Lastly, it provides a chapter summary.

1.1 Background to the study

According to a study conducted by Education Management Information System (EMIS) in 2014, there were about 206,084 learners with Special Educational Needs (SEN) in Malawi. Amongst these, 25,316 were learners with HI of which 3,085 were Deaf while 22,231 were HH. This number, however, did not specify learners who were in inclusive settings or in special schools. According to Ministry of Education, Science, and Technology Special Needs Education (SNE) Directorate (2015), the number of learners with HI in the country has increased to 29,940 (EMIS, 2015 report). The findings suggest that a lot of children are deafened and/or are enrolling for primary education which was not the case before.

On one hand, the findings by EMIS (2015) shows that there are 29,940 learners with HI, of which 3,537 are Deaf and 26,403 HH. However, the report did not indicate the actual figures of those learners in special schools or inclusive education settings. On the other hand, Ministry of Education Special Needs Education Directorate (2010) findings indicate that there are 1,787 learners with HI in inclusive primary schools. Whereas those in special schools i.e. schools of the Deaf are 847 (Montfort Center for the Deaf, 2016). This shows that more learners with HI are being enrolled in inclusive schools as opposed to those in special schools. This shows that people are now embracing the inclusive education concept which encourages children to be enrolled in schools closer to their homes and learn together with their hearing peers (Ministry of Education Special Needs Education Directorate (2010), hence giving learners with HI an opportunity to choose the education system which is best suited for their needs depending on the nature and severity of their hearing loss.

1.1.1 Special Schools

According to Montfort Special Needs Education, Teachers' College Lecturers' Handbook (2010), Special schools are those that accommodate all learners with special educational needs (SEN) as they would require specially trained teachers, special teaching methods and resources. Most of the learners admitted in special schools are those who can not do well in the inclusive setting due to the teachers' lack of knowledge in special needs education (Ibid). These include learners with HI who may require specialized services such as sign language and total communication for them to effectively participate in classroom and extra-curricular activities.

There are currently six special schools for learners with HI in the country and these are: Mary View in Chiladzulu, Mua in Dedza, and Mountain View in Thyolo which were established by the Catholic Church Missionaries, and Embangweni in Mzimba was established by the Church of Central Africa Presbyterian (CCAP) Missionaries. These schools could enroll up to 170 learners each. There are also other small schools which enroll about 80 learners with HI such as; Bandawe and Karonga in the northern region (Montfort Special Needs Education, Teachers' College Lecturers' Handbook (2010), This challenge is that these schools could not absorb the growing number of learners with HI who may require specialized services countrywide. The disadvantage is that, all these special schools are missionary establishments, further apart and are therefore, residential. This means that learners leave their homes when they still require motherly care as they cannot wash their own clothes and bath themselves (Montfort Special Needs Education (SNE), Lecturers' Handbook, 2010). The current enrolment for these six schools is shown in Table 1 below.

Table 1: Total enrolment of learners in the six Schools of the Deaf in Malawi

Name of Special School	Enrolment
Mary View	165
Mua	195
Mountain View	153
Embangweni	168
Bandawe	80
Karonga	86
Total	857

1.1.2 Inclusive schools

There are International Standards and Frameworks (ISFs) which advocate for inclusive education at all levels and these have influenced the development of policies on inclusive education in many countries including Malawi. Two of such ISFs are the Salamanca Statement and Framework on Action for Special Needs Education (UNESCO, 1994) and the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2007). The Salamanca Statement on Principles, Policy and Practice in Special Needs Education of the UNESCO World Conference on Special Needs Education asserts that inclusion is a universal right that links to an inclusive society and provides guidelines for including all learners with special educational needs into mainstream classrooms alongside their ‘abled’ peers regardless of their physical, intellectual, social, emotional, linguistic or other conditions (UNESCO, 1994).

The Statement begins with a commitment to Education for All, recognising the necessity and urgency of providing education for all children, young people and adults ‘within the regular education system.’ It stipulates that those children with special educational needs ‘must have access to regular schools.’ It further states that:

- every child has a fundamental right to education and must be given the opportunity to achieve and maintain acceptable levels of learning;
- every child has unique characteristics, interests, abilities and learning needs;
- education systems should be designed and educational programmes implemented to take into account the wide diversity of these characteristics and needs; and

- those with special educational needs (SEN) must have access to mainstream schools which should accommodate them within a child-centred pedagogy capable of meeting these needs.

Regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all. Moreover, they provide an effective education for the majority (without special needs) and improve the efficiency and ultimately, the cost effectiveness of the entire education system (UNESCO, 1994).

The Convention on the Rights of Persons with Disabilities (UN, 2007, Article 24 on Education)

provides for appropriate measures that States parties should take and some of these are:

- (a) Facilitating the learning of Braille, alternative script, augmentative and alternative modes, means and formats of communication and orientation and mobility skills, and facilitating support and mentoring;
- (b) Facilitating the learning of SL and the promotion of the linguistic identity of the Deaf community;
- (c) Ensuring that the education of persons, and in particular children, who are Blind, Deaf or Deaf blind, is delivered in the most appropriate languages and modes and means of communication for the individual, and in environments which maximize academic and social development.

Furthermore, UNCRRPD Article 24 paragraph 4 articulates that to ensure the realization of this right, States Parties shall;

“....take appropriate measures to employ teachers, including teachers with disabilities, who are qualified in SL and/or Braille, and to train professionals and staff who work at all levels of education. Such training shall incorporate disability awareness and the use of appropriate augmentative and alternative modes, means and formats of communication, educational techniques and materials to support persons with disabilities”. (UNCRRPD 2007)

In response to such International Standards and Frameworks, Malawi has adopted policies on inclusion and enacted the Disability Act which among others compels parents/guardians to send their children with SEN to school and encourages schools to be welcoming to all learners irrespective of diversity. The positive result is that more learners with HI, among others, are being enrolled in inclusive schools which are one of the recommendations for Inclusive education; that learners with SEN should learn alongside those without SEN and be given the appropriate assistance they would require for them to do well in their studies (Montfort SNE Teachers' College Lecturers' Handbook, 2010). This chimes with Robertson (2009) that inclusive education is about how we develop and design our schools, classrooms, programmes and attitudes so that all learners can learn and participate together.

Nevertheless, learners with HI still face challenges in mainstream schools. For example, learners who are HH even though they can benefit from the use of hearing aids that amplify sound, still experience difficulties. This is because the hearing aids are not selective as they can pick any background noise hence, distorting the whole

hearing process and the learners would need to be given the support they would require from their teachers for them to perform well. It is expected that, in inclusive education settings, teachers should have the knowledge and skills of how they can communicate with learners with HI. However, in most of these inclusive schools, mainstream teachers are not conversant and have no knowledge of SL and they find it difficult to teach and communicate with learners with HI. If the school has specialist teachers, it means that the learners would benefit because the specialist teachers interpret for them and the mainstream teachers (Montfort Special Needs Education, Teachers' College Lecturers' Handbook (2010),

1.1.3 Sign Language

Linguists have studied and proved that SL is a true language as it has its own grammatical rules (Nakamura, 2008). It is the only form of communication for people who are born Deaf as that is how they started to express their emotions, needs and wants. Very few, who lose hearing after the acquisition of speech, can lip-read or speech-read though, with some difficulties due to the reasons stated above (ibid). There are supra-segmental features of speech that learners with HI find hard to differentiate and understand because they look the same on the mouth. SL cannot be heard, but can be seen on the hands, body movements and facial expressions (ibid)

Meanwhile, linguists have shown that a high degree of fluency in SL at an early age facilitates faster acquisition of literacy and other academic skills (Gallaudet University 2007). Biggs (2004) observes that, native signers or those for whom SL is their mother tongue, show better ease of transition between SL and their country's written and spoken language than those who learnt SL at a later stage. This study

therefore, intends to establish how teachers use SL in the teaching of learners with hearing loss in both Malawi's special and inclusive primary schools.

1.2 Statement of the problem

SL is a fully fledged language with its own vocabulary, alphabet, syntax and grammar (WFD, 1993). It is the only form of communication for persons who were born Deaf as that is how they started to express their needs and wants from a very tender age. Very few, who lose hearing after the acquisition of speech, can lip-read, though with difficulties due to supra-segmental features of speech (ibid) With the policies on inclusive education, learners with HI are also included in the mainstream primary schools where some teachers are not knowledgeable of Special Needs Education (SNE) and are not conversant in SL. Other learners with HI are being taught in special schools where some teachers also lack the skills to communicate in SL with learners with HI. Thus, the study therefore, aimed at exploring the use of SL as a medium of instruction for learners with HI in both special and inclusive primary schools.

1.3 Purpose of the study

The purpose of this study was to explore how SL is used in the teaching and learning of learners with HI in the selected special and inclusive primary schools in Malawi and if the use of SL can affect the teaching and learning process of such learners.

1.4 Research questions

To explore the question of SL use in special and inclusive primary schools, the study was guided by the following research questions

1.4.1 Main question:

To what extent is SL used as a medium of instruction for HI learners with HI (Deaf and HH) in both special and inclusive primary schools in Malawi?

1.4.2 Sub-research questions:

- (a) How do teachers communicate with learners with HI (Deaf or HH) in special and inclusive primary schools?
- (b) What are some of the challenges faced by teachers in teaching learners with HI in special and inclusive primary schools?
- (c) What are the strategies that can be used to address such communication challenges?
- (d) What are the challenges faced by learners with HI in the teaching and learning process?
- (e) What are the strategies that can be used to address such speech and communication challenges?
- (f) How well did the teachers understand the learners when communicating with them during the teaching and learning process?

1.5 Significance of the study

This study is of great significance as it comes at a time when the country is moving towards the inclusion of learners with SEN into mainstream primary school classrooms. The findings of this study would therefore, contribute to knowledge since these findings have unveiled teachers' lack of knowledge about how to communicate with learners with HI in SL as a medium of instruction in mainstream schools whilst in special schools some have the knowledge and communication skills. Furthermore,

the study also revealed the educational challenges to be addressed so that learners with HI can reach their full potential in education. The findings of this study would also inform policy makers as they develop and revise policies in inclusive primary education. It would also inform the context of practice, for example, teachers would be trained how they could use SL to teach and manage learners with HI in inclusive primary school settings and special primary schools where there are no SL Interpreters (SLI).

1.6 Limitations of the study

This study was limited by a number of factors. The major one being time constraint resulting in the researcher to study only two schools and three teachers. On top of that, Malawi has very few primary Schools for the Deaf which are farther apart. Furthermore, the researcher managed to study just one special school and one inclusive school setting. This was because the office of the District Education Manager (DEM) did not have records of inclusive primary schools that have learners with HI (Deaf, and HH) in the district. Thus, the researcher had to go hunting for schools where Deaf learners are enrolled with the help of some Specialist Teachers of learners with Learning Difficulties (LD) which is far and in a very remote area without any means of transport. As such, more time was wasted walking, resulting in a reduced number of participants and schools as more time was spent travelling and searching for the school.

In addition, the research was conducted during the rainy season and this posed travelling challenges on the part of the researcher. Thus, the researcher had no choice, but to study the primary school that was found to have learners with HI and the special primary school that was close as schools of the Deaf are further apart. Such

being the case, the special schools are residential since learners could not commute from their respective homes to school. To get to the inclusive school, the researcher had to board a minibus and then walk all the way after disembarking from the minibus to the school under study. It therefore, required leaving home early in order to catch up with school time.

The study mainly focused on the views and experiences of the teachers in the two school settings. This means that the findings of the study may not be generalized for the whole district or the whole country because the sample size was small. However, these findings would give a glimpse of the problems that specialist and non-specialist teachers face when teaching learners with HI (Deaf or HH).

1.7 Definition of terms

This section provides the definition of the terms used in this thesis.

Assistive Devices: These are appropriate aids, appliances, technologies and other support systems that facilitate effective learning of learners with special educational needs.

Barriers: Internal and external factors that prevent learners from reaching their full potential.

Caregiver: Any person caring for a child

Catch and seize: A skill that a teacher uses to pick what the learner is interested to talk about. Once the teacher picks it up, s/he gets it as a chalkboard lesson and it becomes a source of information for the teacher to correct grammar and elaborate the topic for learners' understanding

Cued speech : a method of communication in which the mouth movements of speech are combined with a system of hand movements to facilitate

understanding and use by people who are Deaf or hard of hearing

Deaf Community: A group of Deaf individuals, who use SL, share a Deaf Culture and fight for the rights of Deaf people

First language: A language that one learned first and use best for communication.

Hearing aid: A device that amplifies sound which people with hearing loss wear in their ears to enable them hear well.

Hearing Impairment: A reduced ability to hear well, Hornby (1995).

Maternal Reflective Method (MRM): This is a skill where teachers imitate what mothers do in training children to speak mother tongue.

Manual Alphabet: This is a set of 26 hand shapes and positions representing the 26 letters of the English Alphabet. It can be used for spelling words that have no signs and names of people.

Schools of the Deaf: Schools that use SL as a medium of instruction for teaching and learning and only enroll learners who are Deaf (Montfort SNE Lecturer's Handbook, 2010)

Sign Language: This is a visual-gestural natural language predominantly used by the Deaf and has its own distinct grammar. It uses hand shapes; body movements, gestures, and facial expression to communicate ideas, moods, thoughts, needs, and feelings. It is linguistically accepted as a fully developed language of the Deaf and can be acquired through exposure to the language and through instruction provided in the teaching and learning process?

Special Needs Education Teacher: A teacher specially trained to teach and assist learner's special educational needs.

Special School: A school that provides educational and other related services solely to learners with special educational needs and is staffed by specially trained teachers

Spoken Language: A language whose mode of expression is oral or vocal.

Supra-segmental: prosodic – relating to the tune and rhythm of speech. Such features are hard for the Deaf to understand because they look the same on the mouth.

Syntax: The system of rules governing the creation of sentences.

Teacher of the Deaf: A teacher specially trained to teach learners who are Deaf.

1.8 Chapter Summary

The chapter has highlighted the background of the study, statement of the problem, purpose of the study; significance of the study, limitations of the study, and definition of terms. The following chapter reviews the relevant literature and discusses briefly the theoretical framework that has been adopted in this study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Chapter Overview

This chapter comprises a review of literature on the issues surrounding the use of SL as a medium of instruction in the education of learners with HI (Deaf and HH) in both special primary school of the Deaf and inclusive primary school. However, not much literature or studies were found on the use of SL in Malawi. The literature mostly used in this thesis was drawn from other countries. The literature is based on the main themes from the research questions and the emerging themes. Furthermore, the chapter identifies the gaps and the main emerging issues from the key literature on the topic of study. It will define SL, discuss the use of SL in general, how teachers use SL as a medium of instruction in special and inclusive primary schools, challenges faced by teachers in both special and inclusive primary schools as well as strategies that can be used to address the indicated challenges.

2.1 Defining SL

SL is a visual-gestural language that uses a system of manual, facial and body movements as means of communication. Facial expressions convey the mood of the signer. In fact, the use of SL involves the whole person. It is not a universal language and different SLs are used in different countries, like the many spoken languages all over the world (Brentari, 2010). It is a language that uses hands, body movements and facial expressions while the receiver uses vision to interpret the signs, facial expressions, and body movements. Nevertheless, Deaf people are of two categories,

the medical model of deafness identifies Deaf people with small ‘d’ which is a pathological and audiological experience (Ladd, 2003) and believes that Deaf people can be treated and cured’ (p 114). Whereas Deaf with capital ‘D’ signifies a socio-cultural identity for whom SLs, Deaf cultures and communities collectively represent their primary experience and allegiance (Brueggemann, 2000; Ladd, 2003). This is signified by their choice of communication that differs from the majority society, in this case SL is a preferred language, (Marschark and Spencer, 2003) Therefore, my paper has adopted Deaf with capital ‘D’ to embrace the socio-cultural model of Deafness that corresponds with the social model of disability.

Most Deaf people around the world communicate using SL as distinct from spoken language in their daily lives. HI tends to impair a person’s ability to localize sound. This particular effect is not a matter of major significance, although it can adversely influence the learning of spoken language. When HI is experienced by older children or adults, its effects tend to be less severe than those experienced by young children with a similar degree of impairment (Ling, 1989). The following chapter reviews the relevant literature and briefly discusses the theoretical framework that has been adopted in this study.

SLs are organized like SLs, and can be analyzed at phonological, morphological, grammatical and lexical levels, and there are differences at each of these levels between the many different SLs. There are, however, language families of SLs: American SL (ASL), French SL (FSL), (or langue des signes française, LSF) and Irish SL (ISL) are part of the same SL family (Brentari, 2010).

Some of the world’s SLs are legally recognized in national laws and constitutions, or are mentioned in the laws of different countries, such as those relating to education,

the justice systems, and etcetera. Other SLs are not recognized or considered as languages. Deaf communities all over the world strive to have their SLs recognized as fully fledged languages and to secure their right to live their life in their SL (ibid). Signed languages in most countries are not written languages – just like many other (spoken) languages of the world. Signed languages are processed predominantly in the left hemisphere of the brain, just as all other (spoken) languages are, in the Broca's and Wernicke's areas, and so they are natural languages (ibid).

The selected literature is from similar studies and theories to the subject from the current information and back in history; with the intention of providing a comprehensive understanding of the subject to save the credibility of my study, as Gall, Gall and Borg (2009) point out:

“Unless your study explicitly builds on the work of other researchers in your area of enquiry, it is unlikely to contribute to research knowledge” (p.96).

Marshall (as cited in Gall et al. 2009) emphasized that:

“for research to make a substantial contribution, it must be based on adequate knowledge of the field and the study's introduction must reflect this knowledge”

(<https://www.researchgate.net/publication/255910767-Gallet.72>).

In Malawi, learners with HI (HI) experience difficulties in mastering literacy skills as reflected through their persistent failure to pass the Primary School Leaving Certificate Examination (PSLCE) which largely results from lack of adequate reading and writing skills.

Although new initiatives have been put in place to address the issue of literacy manifested through the

implementation of a thematic curriculum, reading and writing for learners with hearing loss has received limited attention because of lack of books and mostly they are not assisted to read due to the large classes in inclusive primary schools. This results in many of them failing to reach the literacy level as their ordinary peers.

It is therefore, important that SL needs to be used by both Teachers of the Deaf (ToDs) other specialist teachers and teachers in inclusive setting because the country is lobbying for and moving towards inclusive education. Thus, learners with hearing loss will also be found in inclusive schools because Malawi has adopted policies on inclusive education. Children with mild hearing loss are able to hear and repeat words spoken in a normal voice at one meter. Children with severe hearing loss are able to hear some words shouted in the ear. These would benefit from the use of hearing aids, but a child who has a profound hearing loss (deafness), is unable to hear and understand even a shouted voice (Montfort SNE Teachers' College Lecturer's Handbook (2010).

Taylor and Bishop (1991) assert that a few children with profound HI do achieve intelligible speech. Scientific studies produce differing results but, however, they are dressed up, all show that very few schools leavers who are severely or profoundly Deaf, speak intelligibly. With education tied down to oral communication, language levels achieved for these learners permit very little learning. Heroic efforts are made to pour in language and learning but so little is heard that most children emerge virtually illiterate and uneducated. They further argue that;

“Adding SL means of communication becomes relaxed, fluent and fun, thus learning takes place. Such a method is hard work and not as good as a spoken communication for those that can hear really well, but it is like manna from heaven for those that cannot.” (Taylor and Bishop, 1991, p 54).

2.2 Defining the terms HI, HH and Deaf

Ross in Robertson (2009) explains three terms most commonly used to describe hearing loss. These are: HI, HH and Deaf. These terms can have a variety of meanings and contexts that ought to be explored. The definitions proposed by Ross, an audiologist and a person who experiences hearing loss himself are very useful. Ross uses the term ‘HI’ to describe any type of hearing loss. The terms HH and Deaf are used functionally. These terms are not associated with the time of onset of the hearing loss, or with the audiometric degree of the hearing loss. Rather, a person is HH if he or she learned language primarily by hearing and listening. So, a person could have been born with a profound hearing loss, but through amplification technology and auditory-verbal intervention enabled him or her to learn language primarily by hearing and listening, then the person could be functionally HH. He or she has a “hearing brain” (Robertson, 2009).

Ross further elaborates on his proposed functional definition by stating that, a child or anyone who is functionally HH is much more like a typical hearing person, relative to how information is learned, than he or she is like someone who is functionally Deaf. A person who is HH when through hearing aids or cochlear implants accesses and develops the auditory centres of the brain like someone who is typically hearing (ibid).

He further explains that:

“A person is functionally Deaf if that person learned language primarily through vision and receives information from the environment primarily through vision. Vision input includes lip- reading, cued speech and SL”
(Robertson,2009, p.59).

Gleason (2000) observes that the most critical language learning occurs in a very short window period of time and research has repeatedly shown that lack of full exposure to language, spoken or otherwise, in this critical period can have devastating and permanent effects. He further observes that babies begin to communicate intentionally before the end of the first year, usually around nine or ten months, when they realize that they can make a vocalization or gesture and expect their caregivers to respond. After this milestone, most children’s language proceeds at an amazingly fast pace. By the time they get to the kindergarten, children may have amassed a vocabulary of 8,000 words and almost all the basic grammatical forms of their language (ibid).

Children with mild hearing loss are able to hear and repeat words spoken in a normal voice at one meter, while those with moderate hearing loss are able to hear and repeat words spoken loudly at one meter. Children with severe hearing loss are able to hear some words shouted into the ear. These would benefit from the use of hearing aids, but a child who has a profound hearing loss (deafness), is unable to hear and understand even a shouted voice (Montfort SNE Teachers’ College Lecturer’s Handbook, 2010).

The sad but simple truth is that very few profoundly Deaf children will ever achieve a useful level of speech whatever educational method is pursued. Taylor and Bishop (1991, p 54) argue that;

“the tragedy is that so often all a Deaf child’s time at school is squandered in quest of a talisman to produce golden speech – a goal forever made to seem just around the next corner, until it is far too late. The goal is attractive normal speech, normal life, normal relationships. How different the reality actually is.”

There is a far wider handicap to poor early communication. The crippling effect of poor communication on the education of most children with HI is all too damaging (ibid). However, not only is learning itself affected, so too are many skills associated with learning. Certain aspects of memory and the ability to think logically are crucial areas that become stultified (ibid).

2.3 The use of SL in general

SL is a means of communication which people with HI use to communicate and share ideas. According to the Malawi National Association of the Deaf (MANAD, 1997) SL has a variety of uses in the life of persons with HI. Like all other languages, SL has structure, morphology, syntax and grammar (Gregory, 2010). People who are Deaf around the world communicate using SL as distinct from spoken language in their everyday lives. It is a visual language that uses a system of manual, facial and body movements as a means of communication. SL is not a universal language, and different SLs are used in different countries, like the many spoken languages all over the world (WFD, 1993).

In Malawi, teachers of the Deaf are required to use SL when teaching learners with HI as learners with HI depend on vision. Thus, teachers are required to face them so that the learners can clearly see the signs and get meaning from them, their body movements, and facial expressions. In education, SL is used as a medium of instruction because learners with HI need it for them to do well in school just like hearing learners use oral language. It is used for the same purposes as spoken languages and learners with HI understand better and faster if they are taught through SL. SL cannot be heard but can be seen on the hands, body movements and facial expressions.

According to MANAD and other National Associations of the Deaf (NADs) in other countries, SL largely follows the sentence structure of Object, Subject Verb (OSV) order as opposed to the usual English sentence structure of Subject Verb object (SVO) order. For example, the English (SVO) sentence “The girl is eating a cake” may be signed as “Cake girl eat”. Tenses are established by signing the time at the beginning of the sentence. For example, the sentence “My mother arrived last week” may be signed as “Last week mother arrive.” With regard to pronouns, they are shown in SL by simply indexing or pointing at the person as in ‘you’, ‘she’, ‘he’ or the item being referred to as in ‘it’. Plurals in SL can be established by repeating the same sign more than once or in the case of pronouns such as ‘you’ and ‘they’ by using a sweeping motion or arc (Urquhart et al, 2009).

Another way to use pronouns which is slightly more complicated is to point at an area within the signing space, but not to anyone in the immediate environment. When that person or object is not in the immediate environment, it is called absent referent. For

example, in a situation where Elizabeth and Charlene are in Zomba and are telling stories, or where Elizabeth wants to tell a story to Charlene about Gloria who is now in Lilongwe. Since Gloria is not with Elizabeth and Charlene's environment, Elizabeth cannot directly point at her. First, she will indicate that she is talking about Gloria by, for example, first of all signing her name, then point to an area in the signing space to refer to her. As long as the context remains the same, Elizabeth can continue using that space to refer to Gloria (Urquhart et al, (2009).

Inflections are another grammatical feature which is commonly used in SL. Vicar (2003) points out that, this feature can be used to eliminate the use of adverbs. For example, instead of using the word 'very' in the sentence "I am very happy to be done with the semester," a skilled signer would simply sign "I /Happy/ Semester/ Finish." S/he would simply do the sign "happy" in an exaggerated fashion with a bigger movement and simply increase facial expression to suggest "very happy". One could inflect the sign "slow" by doing it slower than normal which would mean "very slow." SLs are the only three dimensional or real natural languages in the world. They are not just spoken languages but can also be seen on the hands. They are full languages in their own right. They are rich and dramatic; efficient and compact yet elaborate. They use components that spoken languages simply cannot use (Vicar, 2003).

Signs usually represent ideas and not single words. Many signs are iconic, that is, they use a visual image for signing the idea. Most clearly falling into this category are animals, for example, deer (the antlers), elephant (the trunk), goat (the horns), and hare (the long ears). Signs are also represented by actions, such as milk (milking a

cow), love (giving a hug), growing (coming out of the ground), and butterfly (the shape and action of the butterfly). Other signs are arbitrary and although the originators may have had reasons for forming or moving a sign in a particular way, these reasons are unknown today (Riekehof, 1989).

Hallahan, Kauffman and Fullen (2009) explain that, iconic signs are those which clearly resemble the object or action they represent and are easy to convey meaning. Although children who are Deaf face extraordinary challenges in learning a spoken language, with exposure they can easily learn SL. However, historically, SL has suffered from several misconceptions, including the belief that it is not a true language. The notion that SL is simply a primitive, visual representation of the oral language similar to mime was first challenged by the pioneering work of William Stokoe at Gallaudet University. A linguist, Stokoe submitted that analogous to the phonemes of spoken English, each sign in ASL consists of three parts: hand shape, location, and movement, Stokoe, 1960, Stokoe, Casteline and Croneberg, (1976) (Hallahan, Kauffman and Fullen 2009).

For many years, Stokoe's colleagues scoffed at him, but research in several areas has proved that he was correct in asserting that SL is a true language. Researchers have continued to refine Stokoe's (1960) work on SL Grammar, confirming its complexity . For example, like spoken language has grammatical structures at the sentence level (syntax) as well as the word or sign level, Goldin-Meadow (2003), cited in Hallahan, Kauffman and Fullen (2009). Hand shapes, location and movement are combined to create a grammar every bit as complex as that of spoken language, (ibid).

Riekehof (1989) quoted Alexander Graham Bell, who appeared before the Royal Commission in 1888 to give evidence of teaching the Deaf when he commented:

“We want that method, whatever it is, that will give us the readiest and quickest means of bringing English words to the eyes of the Deaf, and I know of no more expeditious means than the Manual Alphabet.”
(Riekehof, 1989, p 14)

That is, if children who are Deaf are to be taught English, teachers will need to make use of the manual alphabet to spell out English words in order for these learners to understand better. Finger spelling, the use of hand positions has 26 hand shapes representing the 26 letters of the alphabet is considered a vital and historical element of manual communication. The positions of the fingers of the hand do, to some extent, resemble the printed letters of the alphabet (ibid). There are 26 hand shapes that represent the 26 letters of the English Alphabet. This, therefore, makes it easier for Deaf children to spell out words if they are presented in the manual form. To comprehend this, Deaf learners depend on vision to interpret the hand shapes as opposed to hearing children who depend on sound and audition. Thus, they solely depend on their eyes and require the speaker to face them. While hearing children use their auditory channel to hear the sound, learners who are Deaf use the visual channel. To many teachers, the use of Sign Language seems to carry a stigma. Fear of the old phrase ‘Deaf and dumb’ still seethes beneath the surface. Gradually, they become aware of an alternative approach to educating the child with HI. This is presented by the committed oral/aural teacher as a method which produces a speechless child, only able to communicate with their hands (Taylor and Bishop 1991). The figure below is the Manual Alphabet which the Deaf use and can easily see and interpret.



Figure 1: Manual Alphabet for the Deaf

Thus, SL is expressed through the combination of hand shapes and movements, body movements and facial expressions. They contain structures and processes that spoken languages do not have and they have grammatical structures which are suited to the visual medium (Riekehof, 1989). However, it is worth pointing out that the manual alphabet is not SL, but it is used as a manual system that complements the use of SL to spell out words that do not have signs as well as names of people. According to Riekehof (1989);

“Illustrations of the Manual Alphabet have been found to exist early in the Christian era. Today each country has a manual alphabet that uses its own version, which is, therefore, understood only by users of that particular system. Most European countries use a single-handed alphabet but, England’s alphabet requires the use of two hands, ” (Riekehof, 1989, p7).

Similarly, Robertson (2009) reports that a study commissioned by Congress and published by the National Institute for Literacy in 1998 presents a sobering estimate that 21% to 23% or 40 to 44 million Americans over 16 read at the lowest level, Level 1. Some readers at Level 1 are able to do some tasks involving simple reading, but all have difficulty with reading tasks needed in daily living, such as finding more than one item of information in an article or table and filling out applications. The attainment of literacy brings with it all manner of opportunities and pleasures, whereas the neglect of it leaves people in dependence of others for their communication needs. The illiterate or merely functional reader is closed out of much that life offers in our present complex society (Robertson, 2009).

The linguistic market, as the name implies, builds on economic relation within which certain lingual capabilities have a higher currency than others, what Bourdieu refers to as linguistic capital. The linguistic market, according to Bourdieu, is both substantial in being a certain social situation and an abstraction in the forms of rules that regulate the value of lingual utterances and the spread, accumulation and reproduction of linguistic capital. .It has been observed that, wherever communities of the Deaf exist in the world, SLs develop naturally and are in-born. Previously, many people thought SLs were simply manual representations of spoken languages while others thought SL was just a collection of meaningless gestures and therefore attempted to suppress it in various ways. In schools, educators emphasized the oral method over SL. Also, some

people attempted to invent various signing systems such as signed English or manually coded English.

The fact remains that acquisition of most grammatical patterns comes without any conscious teaching and learning of grammar as such. Wilbur (2008) as quoted in Brown (2009) asserts that natural languages are those that can be acquired and learnt without formal intervention and teaching. This process, however, naturally takes place in a normal environment where there are plenty of adult role models from whom children can naturally learn the rules and conventions of that language. The environment of a child who is Deaf is not normal since she or he cannot hear; hence, she or he cannot be exposed to language through normal means (Brown, 2009).

When learners with HI get enrolled in school, they already have some models of communication they use in their families and communities which they could still continue to use. This form is usually in form of signs and gestures that need to be improved in order to facilitate their learning process (Brown, 2009). It has also been pointed by Luckner & Muir (2001) that before any decision is made on how to educate or how to allow your Deaf child to live; you make sure to get as much information as you possibly can. It is therefore important that parents should understand that for learners with HI to learn, they would require teachers to use SL. It is worth pointing out that children are able to understand SL as early as 6 months, but the ability to speak requires complex fine motor skills that don't develop until much later. The result is a frustration and tantrums (Luckner & Muir (2001).

It has further been noted by Easterbrooks and Stephenson (2006) that learning a first language such as SL with consistent exposure to proficient primary language models

has been identified as one of the best practices in supporting literacy development among children with HI. Strategies that support children with HI to learn SL like Kenyan SL (KSL) or another SL prior to the introduction of English or spoken language are considered respectful to the Deaf Culture and they foster ownership by helping learners develop pride and identity in their deaf hood (Enns, 2007; Wilbur, 2000) . The evidence supports the use of a bilingual educational approach that promotes the use of a learner's primary language (L1) to develop skills in the learner's secondary language (L2) even though the education curriculum has multiple objectives beyond just language development (Gregory, 2010). Since using a learner's primary language in instruction necessitates conceptual understanding through bridging the gap between the learner's experiences and the process of learning (Enns, 2007), it is important to explore how the bilingualism approach could be generalized to other school learning objectives/subjects.

A lack of consistent instructional approaches and a limited exposure to a learner's primary language has led to delayed language development and a limited capacity in construing abstract content (Hyde, Power, & Zevenbergen, 2003). For example, these factors have limited the capacity of learners with HI to understand scientific concepts, Molander, Norell & Pedersen, 2001. Molander et al. (2001) conducted an interview in a Swedish compulsory school with the aim of assessing the reasoning of learners with HI about scientific phenomena. This study implemented two steps:

1. Three 15-year-old Deaf pupils in grade 8 were assessed regarding their use of scientific concepts in problem solving and their ability to link knowledge from different school subjects to life experiences.

2. Seven 17-year-old Deaf pupils in grade 10 used the findings from Step 1 to relate scientific concepts to their daily experiences.

The study revealed a variation in the extent to which learners with HI use scientific principles for reasoning about science phenomena, and that learners with HI have a limited ability to connect the school science framework for reasoning to their daily experiences (Molander et al. 2001). They further generated questions about the need to consider the specific instructional approaches that would bridge the gap between learners with HI interaction with curriculum objectives and his or her daily experiences. This indicates that teachers are constantly searching for new ways to engage their learners in the learning process. Using SL within the classroom is one solution to reach out to all learners. SL can enhance the learning process by bringing visual, auditory and kinaesthetic feedback to help reach all learners (Molander et al. 2001).

Research has shown that pairing signs with English may help learners formulate mental pictures. This multi-modal experience can help create new pathways in the brain for storage and retrieval. This helps the learners remember and recall sight words and spelling words (ibid). Studies have also shown that learners who learn SL for specific sight words learn to read at a faster rate Teachers are using SL to: manage learners' behavior, keep the learners actively engaged, assist them in literacy development of phonics, reading, and spelling, assist them in speech development, schools' language development and promote positive peer to peer communication and interactions (ibid). Therefore, I would argue that it is important for teachers to help learners with HI improve their mental abilities by introducing other spoken languages

alongside SL to make them understand things better and improve in their linguistic skills.

2.4 How teachers use SL as a medium of instruction in special schools

Teachers come to the classroom with noble goals: closing the achievement gap, and illuminating young minds. But first, they must confront a more pressing problem: how to manage children's urgent requests, in the middle of the most carefully planned lessons, for permission to sharpen pencils, get drinks of water or visit the bathroom (Brown, 2009). Thus, SL can be used in a variety of ways apart from the teaching and learning process. For the teaching of learners with HI in schools of the Deaf to be effective, the sitting arrangement should be that which would enable all learners to see the whole view of the teacher. As the learners depend on vision, signs are suited to the visual medium (ibid).

Furthermore, Brown (2009) states that there are special considerations that are supposed to be taken on board when teaching learners with HI. Such as; seating arrangement-facing the learners when talking to them so that learners are able to see the speech movements of their teacher. The clothes that teachers wear should contrast with their skin for learners to easily see the signs as well as keep instructions brief and uncomplicated as possible. Teachers should be clean-shaven so that learners could clearly see their lip movements. In special school classrooms the situation is much improved as learners with HI are seated in semi-circular seating arrangements, learners with HI are offered the best as they are able to see the whole body of their teacher and movements. Learners with a hearing loss, depend on vision as their primary means of receiving information (ibid).

Teachers are supposed to keep instructions brief and uncomplicated as much as possible. When repeating instructions, teachers must repeat exactly without paraphrasing. They should clearly define course requirements, the dates of exams, and when assignments are due as well as provide advance notice of any changes. They should present lecture information in a visual format (e.g. chalkboard, overheads, power point, handouts, real objects, etc.). Use more than one way to demonstrate or explain information; repeat the comments and questions of other learners, especially those from the back rows. Acknowledge who has made the comment so learners with HI can focus on the speaker and understand the information from visual cues. When appropriate, ask for a hearing volunteer to team up with a learner with HI for in-class assignments (Brown (2009). SL has become a saving grace, a way to communicate without interrupting instruction not just in the classroom but in schools, around the area and across the country. Learners may sign the letter "B" for bathroom, "W" for water fountain, "L" for library and Nadel in Brown (2009) who devised the silent system when she was student-teaching four years ago, replies with a nod or by pointing (Brown 2009).



Figure 2: A learner with HI signs the letter ‘B’ to ask for permission to go to the bathroom

2.5 How teachers use SL as a medium of instruction in inclusive schools

General education classrooms are becoming more diverse. Children with a variety of disabilities and from diverse cultural and economic backgrounds are mainstreamed into the general education environment and teachers mostly use the oral method of teaching. This makes it difficult for one teacher to reach out to all the learners using one single type of learning style (Brown, 2009).

Teachers in both special and inclusive primary schools need to use SL communication skills for teaching in order to reach out to all learners with HI in their inclusive classrooms. To achieve this, teachers need to face the learners while speaking so that they are able to see their whole body. If an interpreter is present, teachers should make sure the learner can see both him/her and the interpreter. It is important for the teacher to note that SL is better used in a well-lighted classroom to enable learners see the signs, gestures, and facial expressions. Furthermore, the learners with HI should be placed in front rows of the class so that they should be able to see the whole view of the teacher. It is imperative that teachers should avoid speaking while writing on the chalkboard as learners with HI would benefit from observing speech movements and signs. Teachers should indeed allow several moments extra for oral responses in class discussions. In small group discussions, they should allow for participation by learners with HI (Brown, 2009).

Literature such as Brown (2009) reveals that in order for the learners with HI to reach their full potential in education, teachers in both special and inclusive settings should be trained in SL so that they can effectively communicate with the learners with HI. In turn the learners will benefit from the classroom instructions (ibid).

2.6 Challenges faced by teachers and learners with HI in special and inclusive schools

Education is one of the fields in which disability discrimination has been acute (Marks & Claphan, 2005). Literature such as (Ministry of Education Science and Technology 2009) indicates that the major challenge for both teachers and learners is communication as learners and teachers do not understand each other due to communication breakdown. This is due to the fact that most teachers are not conversant with SL and learners do not comprehend what their teachers are saying.

The baseline study on the living conditions of the Deaf in Malawi done by the Malawi National Association of the Deaf (MANAD, 2009) reported to have found learners with different disabilities under one teacher in a school in Mchinji District. They were packed in a very small storeroom as their classroom. Their teacher was first given a class of learners without special educational needs to teach before attending to these learners with special educational needs. It is worth pointing out that the learning pace and level of understanding of learners with special educational needs is very slow and thus, they need to be given enough time for them to learn well and understand. On top of that, the teacher in question is not specialized to teach learners with HI, hence, communication was a major problem. Such are the experiences of teachers of learners with special educational needs in inclusive primary schools across the country. The greatest challenge persons with HI meet is difficulties with communication because the majority of the population focuses on oral communication methods (WFD, 1993).

Unfortunately, numerous barriers can prevent poor and minority learners from receiving good instruction. Some of these barriers are caused by educators' attitudes

and beliefs; others are the result of institutional practices. The intent of the listing that follows is not to provide a thorough cataloguing of every barrier to sound instruction, but rather to place educators on alert (Cole, 2008). Although education is free at primary level, a few learners with special educational needs receive special needs educational services. Lack of adequate information by mainstream teachers and the communities on the needs of learners with HI contribute to this problem. Learners with HI are unable to attain their fullest educational potential because of various reasons that hinder their participation in education (Ministry of Education, Science and Technology, 2009). These challenges include: Stigma by the community, Inadequate and Lack of specialist teachers and resource centers, Lack and Shortage of specialized teaching, learning resources and assistive devices, Shortage of special schools for the learners with HI, Lack of orientation for parents, and communication breakdown and speech problems.

2.6.1 Stigma by the community

Attitudes of the community towards the education of learners with special educational needs services have negative effects on learners with HI. Things like inappropriate language and behaviours towards these learners deters them from accessing education. Such negative attitudes may lead to exclusion from some school activities, academic failure, low self-esteem, isolation, bullying, abuse, and school dropout (Ministry of Education, Science and Technology, 2009). The Ministry of Education Science and Technology suggests that the best way to address these challenges is to equip parents and guardians with the necessary knowledge and skills for caring and supporting learners with special educational needs and also enforce rules governing the protection of learners with special educational needs. It is also necessary to carry

out awareness campaigns to enlighten the communities that children are a gift from God and whether they are born with a disability or not, they need the love and care from parents as well as the communities in which they live.

To this challenge of stigma can be addressed by involving individuals with disabilities in advocacy as role models as this would show and prove how those individuals have excelled in life as well as contributing to the development of their communities. The communities need to be aware that individuals with disabilities are born within the community and mostly from parents without disabilities or any history of disability and that they are part of the community (Ministry of Education, Science and Technology 2009).

2.6.2 Inadequate and Lack of specialist teachers and resource centers

According to the findings by Ministry of Education, Science and Technology (2009), there is lack of and/or inadequate number of specialist teachers and resource centers to service learners with HI in the country. Thus most learners with HI are often found in schools that have no resource centers or specialist teachers who would effectively teach and manage them. Furthermore, the Ministry of Education suggested that for these problems to be addressed, there is need to build more resource centres and special schools to promote enabling environment for all categories of learners with special educational needs as well as equip Special Needs Education Units and Resource Centres with adequate staff and assistive devices. Public and private institutions to establish libraries with instructional materials accessible by learners with special educational needs (Ministry of Education, Science and Technology 2009).

2.6.3 Lack and Shortage of specialized teaching, learning, assessment resources and assistive devices

Not all schools in Malawi are equipped with assistive devices necessary to facilitate the teaching and learning of learners with HI. Learners with HI require information in appropriate formats such as SL for them to understand instruction. Due to lack of modifications and accommodations to the curriculum content, services such as SL interpreters and teachers, teachers fail to effectively communicate and teach learners with HI. This lack of capacity to provide such support systems make it difficult for learners with HI to attend school due to language and communication barriers as they fail to participate effectively in the learning process (Ministry of Education Science and Technology, 2009). The Ministry of Education to provide specialized teaching, learning resources and assistive devices for learners with special educational needs (ibid).

2.6.4 Shortage of special schools for the learners with HI

Furthermore, Missinzo, (2015) points out that there is no adequate placement for such learners and that there is no political will on the part of the Government as the special schools are few and are all missionary establishments. Thus, learners who are Deaf that are accommodated in the schools of the Deaf, travel long distances to get to school which are further apart and are therefore, residential. Missinzo (2015) pointed out that there is need for Government and communities to work together in establishing special schools within their communities to enable all children attend school and not travel long distances to get to school just because there is no special school in their communities. Communities should take a leading role to ensure their

communities have such facilities to cater for all learners with different special educational needs within reach.

2.6.5 Lack of orientation for parents

Furthermore, Missinzo, (2015) pointed out that there is no orientation of parents on how to use SL and speech reading skills for them to help their children. He also pointed out that the schools of the Deaf have no SL Interpreters and there are no Deaf role models in the schools. He suggested the need to equip parents and guardians with the necessary knowledge and skills for caring and supporting learners with HI. He further suggested that the government should consider employing SL Interpreters who would be of assistance where the teacher is not conversant with SL as well as training and employing teachers who are Deaf.

2.6.6 Communication breakdown and speech problems

There is need to provide orientation of teachers in SL and other communication skills as most of these learners have speech problems but have their own means of communication that needs to be promoted and supported. There is also need to strengthen SNE support system by providing SL Interpreters and Learning Support Assistants such as Note Takers in all resource centres and special schools. We are all aware on how children learn to speak and therefore, it is hard for a child who has never heard a sound to learn to speak when the people around are not interested to learn the language of such children and yet they force the children to learn to speak (Ministry of Education, Science and Technology, 2009).

However, having had worked with learners with HI, the researcher noted that their biggest challenge is communication breakdown and speech problems. Thus, learners are being forced to learn to speak before they have mastered their first language; SL. Proprietors of the special schools of the Deaf say that as long as a Deaf child can laugh and cry, then s/he has the ability to speak without realizing how children learn to speak. On the other hand, SL is not fully developed in Malawi. This is, as a result of lack of funding to develop the Malawian SL Dictionary and the proprietors' insistence on the use of the oral method so that learners have to speech read and learn to speak (Ministry of Education, Science and Technology, (2009).

Teachers in the school for the Deaf bemoaned lack of and late funding as oftentimes the schools lack funding or underfunded to cater for the children as government funding is usually minimal and it takes time for the schools to be funded. The researcher recalls when primary schools for the Deaf were not opened six weeks into the term due to the fact that they were not funded while their counterparts in regular schools had had already opened but they closed at the same time with those in regular primary schools. This permitted very little time for learning for these learners who require more time to understand and learn well. The Ministry of Education, Science and Technology should ensure that these schools are adequately funded as the regular schools.

Some studies such as Turnbull & Turnbull (2006) have provided the challenges affecting learners with special educational needs in general, but not those that are faced by learners with HI in particular. As pointed out earlier by Missinzo (2015), there is lack of political will in as far as the education of learners who are Deaf is

concerned and for all learners with special educational needs in the country as a whole which is evidenced by the number of Schools of the Deaf and that there is no Government School for such learners who would not benefit from the inclusive primary school settings.

2.7 Theoretical Framework

There are several theories that could be employed in an attempt to understand how reading and writing could be taught to learners with HI. Krashen's (2003) theory of language acquisition explains that the acquisition of language has to occur in some environmental setting of the human existence.

In this study both Krashen's theory of language acquisition and Bourdieu's theory on linguistic capital and markets (Bourdieu, 1977) will be used. In his theory, Bourdieu describes the belief of capital and markets as being the most important part that controls the choice and use of language. The theory centers on and explains much on the power of choice and use of language, hence, the relevance of this theory. Bourdieu observes that education is a major component in the production of mass producers and consumers and the production of the market upon which the value of linguistic ability depends. Language is a major asset that represents culture and preserves the cultural values of a community as each community is known by its cultural beliefs, values and indeed, language.

The first argument to be considered is the issue of first language. A Deaf learner cannot successfully learn a second language before mastering the first language which is SL. The hearing learner exposed to majority languages learns the spoken language

and subsequently the written form of the language. This language is predominantly spoken language. In its modality, the majority language input is hardly accessible to a Deaf learner. Thus, as Bourdieu puts it, the learner has the power of choice and use of language. This will help the learner to understand better and it has to occur in environmental setting as pointed out by Krashen. Thus, these two theories are linked in this study as the learner has the power and freedom to choose the language s/he would want to use for him or her to understand, be it through the auditory channel or the visual channel, which would be used within the learning environment.

Similarly, most Deaf people prefer the use of SL as the medium of communication both at school and in the community. The future of a language depends on what happens to the tools that are responsible for the production and reproduction of the linguistic capital such as the school system as the school system has complete control over the production and reproduction of the large number of producers and consumers (Bourdieu, 1977). Language should not, therefore, be forced on children as it is them that would be using a language they choose for their understanding in the communication and learning process. This theory has been chosen because every person has the right, freedom and power to choose a language s/he would understand in order to learn and benefit from the lesson. If one does not understand a language that is being used during teaching, no learning takes place.

Bourdieu further observes that when one language dominates the linguistic market, it becomes a norm against which prices of the other modes of expression, and with them the values of the various components are defined (Bourdieu, 1977). Pierre Bourdieu's concept of linguistic market and linguistic capital is the application of his important

concept of *habitus* to the realm of linguistic and more specifically discourse analysis. In a sense, the idea of the linguistic market is the consideration of social structures when talking about what Chomsky (1969) defines as lingual competence. While competence for Chomsky is universal, in Bourdieu's sense it very much depends on your background, social status etc. Lingual competence, for Bourdieu, in the context of the linguistic market, is the ability to speak to the point, in a manner that fits the circumstances and objectives within those circumstances. It is an ability to use the right words, right grammar, register, tone, body language and so forth in a manner that is favourable by the social structure of the linguistic market (<https://culturalstudiesnow.blogspot.com/2011/11/Pierre-bourdieu's-concept-of-linguistic.html>). Thus the social structure of SL is favourable within the Deaf community.

2.8 Chapter summary

The chapter has discussed the literature related to the use of SL as a medium of instruction for learners with HI in special and inclusive schools, the challenges faced by teachers and learners in the two school settings as well as strategies for addressing those challenges. It has also highlighted the crucial role SL plays in facilitating communication during the teaching and learning process. The chapter has further discussed challenges teachers face in the absence of SL use and how those challenges could be addressed. Major issues were singled out in the SL context. This would in turn, provide a conducive and welcoming teaching and learning environment for all learners with and without special educational needs as well as where language across the curriculum is concerned. All learning areas require the use of language through which learners can understand the concepts being taught. In the presence of

communication breakdown and speech problems, learning could be an uphill struggle for learners with HI. The following chapter outlines the research design and methodology employed for the study.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Chapter Overview

This chapter presents the research design and methodology used in this study. It will begin by examining the research design which is a case study design. Based on interpretative paradigm the study adopted the qualitative approach to address the issues at hand. The chapter first describes the theoretical perspectives that guided the choice of the research design and methodology. It also describes the methods of data generation, data analysis and limitations of the study. It has also considered ethical issues and trustworthiness.

3.1 Theoretical Perspectives

Creswell (2014) points out that it is important for the researchers to explore a range of theories that are available to them as well as how these can be selected. Similarly, Gray, (2009) adds that investigation is informed by a number of theoretical perspectives that determine which method to be used in a study. The theoretical perspectives are also called paradigms. Furthermore, Blanche, Durrheim and Painter 2006, (p.6) state that paradigms are “all-encompassing systems of unified practices and thinking that define for researchers the nature of their inquiry along three dimensions; methodology, epistemology and ontology.” Methodology looks at how the researcher carries out the study (Cohen & Manion, 1994). Epistemology looks at the nature of the relationship between the researcher and what is to be known while

ontology looks at the nature of reality (ibid). Interpretive and constructivist paradigms are some of the theoretical perspectives for inquiry.

Epistemology is defined as ‘the theory of knowledge and how we know things’; and involves the relationship between the “knower” (research participant) and the “would-be-knower” (researcher) (see, for example, Ross, 2010, p.18; Ponteretto, 2005, p.131). As a researcher and someone who understands Deaf culture, I was interested to generate knowledge on how SL is used when teaching Deaf learners in both special and mainstream primary schools. This perspective helped me to interpret teachers and learner’s experiences that occur within the constructs of their own reality. Research has shown that qualitative studies follow the interpretivist paradigm in which the researcher is interested in understanding and discovering how the target participants interpret their situation or phenomenon by taking into consideration processes, perspectives and worldviews (Merriam, 2002).

This study sought to explore the use of SL as a medium of instruction for learners who are Deaf in both special and inclusive schools. It was therefore, guided by interpretive paradigm that is shaped by epistemological assumptions because it allows for subjective experiences and is controlled by any manipulation of reality. The researcher sought the participants’ interpretation of issues at hand and their experiences in teaching and managing learners with HI. Interpretivism includes “accepting and seeking multiple perspectives, being open to change,

Therefore, this perspective unveiled the reality of how SL is used by teachers when teaching learners with HI by capturing their experiences and how they make meaning of their situation. Furthermore, it is argued that social sciences seek to understand the phenomena by interpreting the meanings obtained from the participants because reality is socially constructed (Tsang, 2013, p.174-186), and including people who are part of the process being studied can explain the social world surrounding them better (Cohen et al, 2007). In this regard, teachers of learners with HI are better positioned to articulate issues affecting these learners due to their practical experience of deafness and inclusive education. The concept brought new insights for participants for it enabled them to relate their personal experiences to how learners with HI are being given the opportunity to access education through the use of SL. such that both the Deaf and professionals who participated in the study were able to highlight gaps that need to be worked on to improve the plight of learners with HI and increase their chances of accessing education.

The study sought to explore the use of SL as a medium of instruction for learners with HI in both special and inclusive school settings. The nature of the study required that the researcher interact with the participants in their natural setting so as to have an in-depth understanding of the reality being sought out. Hence, this could only be done from an interpretive perspective because it allows for subjective experiences and is controlled by any manipulation of reality. The researcher sought the participants' interpretation of the issues at hand and their experiences in teaching and managing learners with HI. Interpretivism includes "accepting and seeking multiple perspectives, being open to change, practicing iterative and emergent data collection

techniques, promoting participatory and holistic research, and going beyond the inductive and deductive approach” (Willis, 2007).

Despite the fact that interpretive paradigm is not a dominant model of research, it is gaining considerable influence because it can accommodate multiple perspectives and versions of truths. Reflecting to the above evaluations of the scholars, the researcher thought of working within the interpretive paradigm and qualitative approach in this study.

3.2 Research Design

The research design in this study followed the case study design. According to Creswell (2012), “a case study is a research methodology in which the researcher explores a single entity or phenomenal “the case” bounded by time and activity, a program, event, process, institution or social group and collects detailed information by using a variety of data collection procedures during a sustained period of time” (Creswell 2012, p.12).

Creswell further explains that in a case study much can be learned from studying just one individual, one classroom, one school, or one district (Fraenkel & Wallen, 2000, p.537). A case study was ideal for this study because the purpose was to explore the use of SL in the teaching of learners with HI. There was therefore, need for a thorough investigation of the subject matter under study. This involved finding out from teachers how they felt about using SL in the acquisition of literacy and language skills. Thus, the researcher had to observe what actually happened during the teaching and learning process and how the teachers interacted with the learners. This was,

therefore, ideal to study what was actually happening during the teaching and learning process. The case for the present study was the two settings of the schools; namely School of the Deaf and Inclusive School that included learners with HI.

In a case study, you examine attitudes, behaviours, and the entire environment in which the activity is taking place which is the natural setting of the teaching and learning process to give you an understanding on how things work (Kane, 1995, p. 175). This included finding out from the teachers how they feel about SL use. The use of a case study allows the researcher to use multiple sources for data collection (Frankael & Wallen, 2000) The study was a small scale one and therefore, a case study was ideal because of the assertion that a case study is in many ways, ideally suited for the needs and resources of a small-scale researcher (Blaxter, Huges & Tight, 2001). Furthermore, the researcher did not intend to generalize the findings, but aimed at studying a single case whose findings could be applied to similar cases as is the case in case studies. As a result, the researcher did not aim to cover the whole population and extract common factors, but to provide an in-depth picture of a particular area of the educational world (Drever, 1995), in this case, the two schools in Chiladzulu District.

To achieve this, it is important to gain an overview of global and local trends in the education of learners with HI and what led to adoption of inclusion across the globe as well as in the Malawian Education System. This was achieved by examining some policies, documents, and research from around the globe to gain a holistic, overall view, namely, through the use of secondary data sources. Other data regarding the number of learners and schools of learners with HI were generated through short

message sending texts with the principal of the only college that trains specialist teachers of learners with SEN in the country, head teachers of the schools and also Special Needs Education Directorate which is far away in Lilongwe. Thus, they provided the numbers as they have records of the situation of learners with SEN in Malawi.

3.3 Research Methodology

Qualitative and quantitative research methodologies are seen as being on the opposite ends of the research continuum. Quantitative researchers work with few variables and many cases, while qualitative researchers, on the other hand, rely on a few cases and many variables (Ragin, 2014). Quantitative research involves the use of statistics, ‘yes/no/how many’ type of questions in questionnaires or interviews, which help to narrow down or quantify a situation or phenomenon.

This study adopted qualitative methodology which is defined as “an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyses words, reports detailed views of informants and conducts the study in a natural setting” (Creswell, 2012, p7).

Qualitative researchers are interested in examining how or what questions, to explore a topic, to develop a detailed view, and take advantage of access to information; to write in an expressive and persuasive language, to spend time in the field, and to reach audiences receptive to qualitative approaches. Using qualitative research methods will assist the researcher in gaining an in-depth, holistic view into the topic

at hand. Denzin and Lincoln (2000) state that, qualitative researchers employ a variety of strategies and methods to collect and analyse a variety of empirical materials.

According to Coffey and Atkinson (1996), qualitative data can occur in a variety of forms, as there isn't one single type. They further state that, data can take the forms of field notes, interview transcripts, transcribed recordings of naturally occurring interaction, documents, pictures, and other graphic representations. These are just a few of the many tools that can be used to generate data and, according to Tesch, (1999), there are no less than 26 analytic strategies and of these, all 26 can be applied to qualitative data. According to Coffey & Atkinson, (1996), qualitative research cannot be done in a spirit of careless rapture, with no principled or disciplined thought whatsoever. In this study, qualitative design was used because it did not require elaborative explanation and answers were straight forward. Thus, one needs to have a goal or a focus in order to have some direction in one's research. There needs to be a link, a common thread that gets weaved through the entire research as a whole. In this study the qualitative methodology was used to gain an understanding of underlying reasons, opinions, and motivations of the teachers under study. It provided insights into the researched issues. Qualitative research is also used to uncover trends in thought and opinions, and dive deeper into the problem (Coffey & Atkinson, 1996).

3.4 Sample and Sampling procedures

A sample consists of elements of the population considered for actual inclusion in the study, or it can be a subset of measurements drawn from a population in which the researcher is interested (Kumar, 2011). There are various types of sampling strategies such as random, systematic, stratified, and purposeful and convenience sampling

strategies. As pointed out by Maxwell (2013), the researcher's intent is not to generalise from the sample to a population, but to explain, describe, and interpret this phenomenon. For this study, the researcher used convenience sampling because qualitative researchers tend to adopt a non-probability sample because they rarely determine its size in advance and have limited knowledge about the larger group or population from which it is drawn (Creswell, 2010).

Convenience sampling which was used in this study is “a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher”¹. Due to limited time and the fact that Malawi has very few schools of the Deaf that are further apart, the researcher used convenience sampling and only managed to study one teacher in school A which is an inclusive setting and two teachers in school B which is a special primary school. This was due to, as earlier pointed out, that the District Education Manager did not have records of schools that have learners with HI (Deaf and HH). As a result of this, the researcher just used the school that she had found to have learners with HI for the study. On top of that, the school has only one class that has learners with HI and the researcher had no choice.

Thus, sampling was conveniently done by simply choosing one class in the pre-school and one in the senior section in the school of the Deaf and the one and only class that has learners with HI in the inclusive setting. Although the results of convenience samples are hard to replicate, the advantage is that the strategy was extremely fast,

¹ <https://www.google.co.uk/#q=convenience+random+sampling>

easy, readily available, and cost effective, causing it to be an extremely attractive option to the researcher².

3.5 Data Generation procedures

According to Kumar (2011) there are two differing approaches to collecting information about a situation, namely the use of both primary and secondary data sources. The primary data was collected through observation and interviews.

3.5.1 Observation

As stated by Cohen et al. (2011) and Creswell (2012), there are two possible roles that researchers can assume when carrying out observations in case studies. Thus, the researchers can either be participant-observers or non-participant observers. According to Creswell (2012), non-participant observers make their observations strictly from outside of the group and do not directly participate in any of the group activities. By contrast, participant observers are researchers who make observations of group activities from within the group being studied, while participating in the same types of activities as the rest of the group (Cohen et al., 2007; Creswell, 2012; Fraenkel, Wallen & Hyun, 2012). For this study, the researcher opted for non-participant observation on which she did not get involved in the activities of the group but remained a passive observer, watching and listening to the activities being done in the classrooms and drawing conclusions from this. Rolfe (2001) contends that observations are useful when researchers want to understand or explain everyday behaviours, or examine the effect of something on everyday behaviour.

² <http://www.conveniencesampling.net/Convenience-Sampling-Advantages.html>

Three observations during the teaching and learning process were conducted in this study. The observation processes helped the researcher gain insight on how teachers used SL as a medium of instruction during the teaching and learning process in both special and inclusive primary school settings. The observations enabled the researcher see how teachers and learners interacted during lessons and also what teaching, learning, and assessment resources were used so that learners with and without HI would understand and benefit from the lessons.

However, one of the drawbacks of the observation is the reactivity problem (Fraenkel & Wallen, 2012). Thus, the learners reacted differently because of the researcher's presence in the classroom. To mitigate this drawback, the researcher did not take notes in the first session. That is, the researcher just observed so that the learners could become accustomed to her presence (ibid). In support of this, Johnson and Turner (2003) explain that reactivity may "decrease significantly after the researcher has been observing for a while." After the first session, the researcher observed the subsequent sessions while taking notes of what was going on in the classroom since the learners had become accustomed to her presence.

3.5.2 Interviews

As pointed out by Fraenkel et al (2012) interviews are utilised to explore what people think or how they feel about a situation. There are three common types of interviews namely, structured, unstructured and semi-structured interviews. In semi-structured interviews, the interviewer uses a schedule of open ended questions, but has the flexibility to probe more deeply and deviate from the interview schedule where needed (McMillan & Schumacher, 2010). For this study, the researcher employed

semi-structured interview and three interviews were conducted with the three teachers and the head teachers to obtain their views on how they felt about the use of SL as a medium of instruction for learners with HI and what challenges they come across in the process of using SL for teaching learners with HI. It also aimed at how they felt about the use of SL for teaching learners with HI. Semi-structured interview allowed the flexibility to probe teachers' answers from the planned semi-structured interview schedule. Semi-structured interviews further allowed the exploration of participants' subjective meanings (Yates, 2004) of the issues at hand. The interview schedule for the interviews conducted during the study is included as Appendix 2.

3.6 Pilot Study

Mason and Henningfield (2001, p. 84) define a pilot study as a “small version of the proposed study, with a restricted sample of subjects”. It can also be the pre-testing or 'trying out' of a particular research instrument (Baker, 1994, p. 182). The pilot study was conducted at an inclusive School P which included learners with HI and School Q of the Deaf to test the data generation tools. The findings from the pilot study assisted the researcher to iron out areas in the tools that were not understood by the participants.

3.7 Secondary Data Sources

Secondary sources of data generation use information previously compiled by other sources. These include official documents such as internal documents (memos, minutes of meeting etc), external communication (newsletters etc) as well as personal records and personal files. Thus, the researcher used some information from research done by other researchers such as international and national documents, and Short

message sending (Sms) texts to communicate with people in order to collect information that was not readily available.

The advantage of using secondary data (SD) has always been the saving of time (Ghauri, 2005). In the so called Internet Era, this fact is more than evident. In the past, secondary data generation used to require many hours of tracking on the long library corridors. New technology has revolutionized this world. The process has been simplified as precise information may be obtained via search engines. All worth library has digitised its generation so that students and researchers may perform more advanced searches. The other advantage is accessibility. In the past, secondary data was often confined to libraries or particular institutions. On top of that, not always did the general public gain access. Internet has especially been revolutionary in this sense. Having an internet connection is frequently the only requirement to access. A simple click is sometimes more than enough to obtain a vast amount of information (ibid).

Strongly connected to the previous advantages is the saving of money (Ghauri, 2005). In general, it is much less expensive than other ways of generating data. One may have analysed larger data sets like those collected by government surveys with no additional cost (ibid).

The first disadvantage of using secondary data is inappropriateness of the data. Data generated by oneself (primary data) is generated with a concrete idea in mind usually to answer a research question or just meet certain objectives. In this sense, secondary data sources may provide you with vast amount of information, but quantity is not

synonymous with appropriateness. This is simply because it has been collected to answer a different research question or objectives. (Denscombe, 2007). The inappropriateness may be, for instance, because of the data was collected many years ago, the information refers to an entire country when one aims to study a specific region, or the opposite, one aims to study an entire country but the information is given in a regional wide. There are two possible ways to be taken when secondary data is not appropriate: first, answering your research question partially with the subsequent lack of validity; and second, you need to find an alternative technique of data generation, such as survey or interviews (ibid). In mitigation, the present researcher only selected the data that was related to the focus area of the study and to the Malawian context.

3.8 Data Analysis

Data analysis can be defined as a complex process of selection, sharpening, sorting, focusing, discarding and organising in order to make sense of the data, draw conclusions and verify the data (Collair, 2000). It can also be called ‘data reduction’ as it refers to the process of selecting, focusing, simplifying, abstracting, and transforming the data (Miles & Huberman, 1994).

“Thematic analysis was used to analyse data which involved searching across a set of data, for example, a number of interviews, to find repeated patterns of meaning.” (Miles & Huberman 1994, p.10).

Thematic analysis followed (Braun & Clarke, 2013) seven phases of data analysis:

- First step, data were transcribed so that the data can be systematically coded and analysed.

- Second step, the researcher immersed herself in and familiarised herself with the data by reading and re-reading the data and noted patterns relevant to the research questions.
- Third step, the researcher coded the data using highlighters by identifying aspects of the data that relate to the research questions and then collated the codes and all the relevant data extracts together.
- Fourth step, the researcher searched for themes by reading the whole data and identifying clusters of similar meaning across the codes and formed larger patterns known as candidate themes. This process went on with reference to the research sub questions.
- Fifth, the researcher reviewed the themes with the research question in mind by determining whether candidate themes fit well with the coded data
- Sixth step, the researcher, defined and named themes by stating what is unique and specific about each one and selecting the data quotations to be presented in the write up.
- Finally, the researcher wrote the report by selecting compelling, vivid examples of data extracts, and relating them back to the research question and literature.

3.9 Ethical Considerations

Before one commences a research, she or he has to look at whether ethically his or her study is sound. In order to do this, it is crucial that the following series of ethical issues are attended to.

3.9.1 Gate-Keepers' Permission

In considering matters of ethics, the researcher obtained a letter of introduction from the University of Malawi as well as a letter of permission from the DEM to carry out the research in the district. The researcher also obtained permission from head teachers of the schools and the concerned teachers.

3.9.2 Informed Consent

It is imperative that one gains informed consent from all participants in your study. If one collects information without the respondent knowing, without their willingness and expressed consent one may be seen as being unethical. One needs to explain the purpose of the research and that confidentiality will be maintained and guaranteed at all costs and thus, the purpose of the research was dully explained (Creswell, 2012). He further states that it is important to obtain such permission as a sign of respect for the site at which the research will be conducted. Informed consent implies that;

“...subjects are made adequately aware of the type of information you want from them, why the information is being sought, what purpose it will be put to, how they are expected to participate in the study, and how it will directly or indirectly affect them.”

(<http://researchbasics.education.uconn.edu/>).

The respondents' decision to participate in the study needs to be voluntary, one that is made without any form of pressure. The respondent also needs to be made aware that she or he has the right and freedom to choose not to assist you in your study as well as choosing to pull out of the study at any time if he or she so wishes. Fourth, you need to make sure that no harm or risk comes to the participants in your study. This could come in the form of blows to self-esteem or 'looking bad' to others, threats to one's interest, position, or advancement in the organisation, to loss of funding for a

program, or up to being sued or arrested (Miles & Huberman, 1994). The participants should not be exposed to risks that are greater than the gains they might derive (Bogdan & Biklen, 1992). Thus, informed consent from the head teachers and concerned teachers was sought. They were made adequately aware of the type of information required from them as this reduces the possibility of misunderstandings arising later (Fraenkel et al., 2012).

3.9.3 Privacy

This refers to how private the information and issues would be handled during and after the research (Cohen et al., 2007). It is concerned with what information and how much a participant may be able to give out to a researcher (Blaxter et al 2001; Drever, 1995). Although the topic under study is of public interest, the respondents were assured that whatever information they give would remain private and that the participants' privacy will be respected. The following definitions may be useful in distinguishing the terms:

“Privacy: control over others’ access to oneself and associated information; preservation of boundaries against giving protected information or receiving unwanted information.” (Sieber, 1992) as cited in Miles and Hubermann (1994, p293)

3.9.4 Confidentiality

Research literature encourages that participants should not be exposed to harm or danger of any kind; physical or psychological. This can, among other things, be achieved by not disclosing the identities of the subjects (Cohen et al., 2007; Fraenkel & Wallen, 2012, Blaxter et al., 2001). In this study confidentiality was assured by keeping the data anonymous. Thus, subjects and schools were given codes. Miles &

Huberman (1994) cited Sieber (1992) “....there should be agreements with a person or organization about what will be done and may not be done with the data; may include legal constraints. (Sieber, 1992) as cited in Miles & Huberman,” (1994, p.293).

3.9.5 Anonymity

Although data was collected for public interest consumption and could include sensitive information, the participants’ identities were concealed and no names were used for both the schools and teachers to ensure anonymity. Thus, the teachers in the study were coded A, B and C, while the schools were coded P and Q for the pilot study and R, and S for the main study. The respondents gave their names and contact details in case there was need for a follow up but the names were not used and therefore, assured of their anonymity.

3.9.6 Issues of Trustworthiness

Trustworthiness and honesty are also crucial in one’s study. Participants should be informed how the information they provide would be used without leaving out valuable information or leave statements open to speculation. Creswell (2009) contends that researchers should make sure that research findings are accurate and detailed as seen from the stand point of the researcher himself or herself, the participants as well as the readers. The process of achieving the study’s trustworthiness also requires the researcher to adopt the principle of credibility, transferability, dependability, conformability and authenticity as stipulated by Marshall & Rossman (2006) and Trochim (2006).

3.9.7 Credibility

The term ‘credibility’ refers to the “accurate identification and description of the phenomenon under study” (Yin, 2011, p.40). As pointed out by Trochim (2006), credibility involves a determination of whether the results of qualitative research are believable from the point of view of the participants in the research process being carried out. In this study, the researcher ensured credibility through triangulation. Triangulation involves the use of “two or more sources to achieve a comprehensive picture of a fixed point of reference” (Padgett, 2008:186). The researcher therefore adopted different data generation tools such as document analysis, interviews and observation as well as two different sites (inclusive school and special school).

3.10 Locating the researcher within the study

The first and only Deaf teacher of the Deaf in Malawi is the researcher herself, who now works as a teacher trainer. She had a Diploma in Education majoring in Human Ecology (Home Economics) at the time she joined special needs education in 1997, underwent training at Montfort Special Needs Teachers’ College and influenced the introduction of SL in the Education of the Deaf. Being Deaf herself, although she has good speech, she found it very hard to understand Deaf children’s speech as she was supposed to teach them orally and do speech training and speech practice with the learners. The learners had speech problems which she could not hear and understand. At the moment, the researcher has a Bachelor’s Degree in Education (Primary) and is now pursuing a Master’s Degree in Education (Primary) at the University of Malawi.

3.11 Chapter summary

The chapter has discussed the research design and methodology used in carrying out this study. It has also been highlighted that it is very important to consider ethical issues in a research as there is need to follow the rules of ethics in order not to offend the study participants by making them participate voluntarily in the process and remain anonymous. These ethical considerations build confidence in the participants and make them willing to participate in other future studies if their anonymity is not violated. The following chapter presents findings of the study.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.0 Chapter Overview

The chapter presents and analytically discusses the findings of the study. The structure of the presentation and discussion of the findings is based on the main themes from the research questions and the emergent themes from the analysed data. The findings are presented with reference to the six research questions and the emergent themes from the analysed data.

The research being qualitative in nature, data was analysed manually by critically exploring the narratives, explanations and discussions generated in line with the research questions and research literature. Priory coding was done whereby I grouped the data according to their similarity. I then narrowed the data further by putting them under common sub-themes and finally came up with the overarching themes. The centre of discussion for this study are learners with HI and all discussions will revolve around the teachers' experiences in teaching learners with HI using SL in both special and inclusive schools. This will be supported by related literature.

The main research question was: To what extent is SL used as a medium of instruction for the learners with HI (Deaf or HH) in both special and inclusive primary schools in Malawi?

The first question dwelt on how teachers communicate with learners. The second question focused on the challenges faced by teachers in both special and inclusive school. The third question concentrated on strategies of addressing the challenges. The fourth question centered on how well teachers understood learners when communicating with them during the teaching and learning process. The fifth question was on the strategies that could be used to address such challenges, while the sixth was on how well the teachers understand the learners when communicating with them in the teaching and learning process.

4.1 How teachers communicate with learners with HI

The participants (teachers) in both school of the Deaf and inclusive school were asked to explain how they communicate with learners with HI. In order to get more insight, the teachers were asked whether they were conversant with SL or not first. The evidence from the interview with the teachers and classroom observations revealed that teachers in both schools use the oral method and that the learners have to speech-read. This is because the teachers never had undergone any SL training. On the other hand, teachers in the School of the Deaf confessed that though they have interest to learn SL, they are forced to use the oral method as the proprietors of the school forbid them to use SL for teaching. However, when they got stuck, they would use SL because the learners have speech problems and that the hearing aids some of them use are not selective as they would pick up any background noise distorting the whole hearing process and they have difficulties understanding each other.

Thus, teachers try to learn the signs from the learners and sometimes use the chalkboard to clarify a point. The learners in the school of the Deaf have no

intelligible spoken language and that the teachers have no option but to use the little SL they learn from the learners despite being forbidden from using it. This, they do for the benefit of the learners so that they would understand what is being said but some of the learners' signs are confusing and posing communication breakdown as the main problem. Teachers are not really conversant with SL and they have problems to understand the learners' speech which is inaudible.

Those who indicated that they were not conversant with SL reported that they communicate with the learners with HI through simple signs, gestures and the chalkboard.

4.1.1 Simple signs and gestures

The findings from the classroom observation showed that during teaching and learning, the learners with HI did not actually understand the teachers' signs which the teachers devised on their own and the researcher could not understand the signs either as they were new.

4.1.2 Chalkboard

It was observed that whenever the teachers failed to understand what the learners with HI were saying and signing, they asked the learners to write on the chalkboard and so did the teachers when not understood by the learners. Sometimes the teachers asked the learners to finger spell the words they meant to say as they could not be understood by their teachers due speech problems. This showed that communication was not effective as the two parties failed to understand each other in the course of

teaching and learning. Similarly, it is argued by Christopher Reid in Taylor and Bishop (1991, p112) that;

“To be fair, a lot of people I met did not know much about deafness and therefore did not know how to deal with me properly. I suppose many of them were rather confused when they saw that my speech was not good yet, I wore hearing aids, and had problems in communicating with them because my speech had been intelligible.”

This tends to concur with the fact that even when someone wore hearing aids, s/he would not be able to fully grasp what is being said as the hearing aids are not 100% able to help one hear well as they would pick any background noise and distort the whole hearing process. Most learners with HI wear hearing aids but still have problems understanding speech as well as learn to speak intelligibly.

The findings further indicate that teachers use a variety of methods to teach learners who are Deaf. These include; demonstrations, illustration, explanation, and SL. However, teachers in both schools expressed concern that they fail to communicate effectively with learners with HI due to the lack of training in SL. Teachers in the school of the Deaf attributed this to the proprietors' insistence on the use of the oral method as opposed to the use of SL. They said the proprietors say as long as the learners who are Deaf can laugh and cry, then they have the capacity to learn to speak. The proprietors do not understand how children learn to speak. This, according to the teachers, poses communication breakdown as the learners have language and speech problems and would prefer to use SL in their learning process.

In spite of their engagement in the teaching and learning situations, analysis demonstrated that the teachers' understanding of SL was inconsistent. While the teachers reported to be using a variety of methods as in teaching of learners who are Deaf, evidence from observations shows the contrary. This means that although the teachers were not doing what they were supposed to do, at least some were aware of what language the learners would prefer to use for learning to effectively take place. The teacher in the inclusive school stated that there is no resource centre and hence, no specialist teachers at the school despite there being learners with HI. Thus, the concerned teacher depended on guess work to effect communication.

The study's findings also revealed that some of the learners with HI could benefit from the use of hearing aids while others could not. All learners depended on vision as they observed their teachers' speech and body movements as well as facial expressions. The teachers mostly used oral method and very minimal use of SL by specialist teachers. Teacher B in school Q explained that even though some learners wore hearing aids most of them had intelligible speech as they could not talk very well.

The oral approach has existed since the mid-18th Century, practiced early in various European countries. SL 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 (Rachel, 2008). 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 SL. 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.

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 affording development that would facilitate the unlocking of the learners' inner symbolic power as well as admission to a social world (Ramsey, 1997). Thus, learners with HI faced problems to interact with their hearing peers during classroom discussions due to language and speech problems and feared being laughed at by their hearing peers and chose to remain silent and not take part in the discussions especially in the inclusive class.

4.1.3 Teaching, learning and assessment resources

The classroom observations showed that teachers had teaching, learning and assessment resources appropriate for their lessons but the lesson plans were sort of copied from the Teacher's Guide. Involvement of learners with HI in the special school was good as compared to the inclusive school where the regular teacher's attention was mostly focused on hearing learners with minimal involvement of learners with HI as the class has 56 learners. The seating arrangement in the special

school was in a form of a horse shoe which enabled all learners to see the whole body of their teacher. In the inclusive class, learners were seated in rows facing each other and the teacher talked while writing on the chalkboard and moving around the classroom and learners with HI had to follow the teacher with their eyes turning their necks while the teacher was facing the other way.

This did not allow learners with HI to see the face of their teacher as he kept moving around the classroom. However, the methods used were learner-centred as most learners were involved in the lesson either in answering questions or when asked to write melody bows under words or point something on the chalkboard, chart or the teaching aids which were used. Discussions, demonstrations, conversation, question and answer methods were employed though some learners did not understand the questions and gave wrong answers to the asked questions due to communication breakdown.

4.2 Challenges faced by teachers when teaching learners with HI in special and inclusive schools

Teachers were asked to mention the challenges that they face when teaching the learners with HI in special and inclusive schools. The challenges mentioned were inability to understand learners' speech and signs, lack of SL communication skills and lack of training in SL. The teachers were further asked to indicate the challenges faced by the learners with HI in special and inclusive schools. The findings show that the challenges were speech problems and word pronunciation as the main problems and that learners usually feel isolated and withdrawn especially in the inclusive class and they could not participate in the class activities and chose to remain silent.

The teachers could not understand the learners as they could not speak intelligibly and teachers use speech practice and speech training by using chalk dust, chicken feather or paper strips held in front of the mouth to differentiate words that look similar on the mouth. They further explained that sometimes learners could be taken to the speech room where the teacher and the learner would sit in front of a mirror so that the learner could see the speech movements of the teacher in the mirror and imitate them. Thus, they do implement these strategies to curb the communication barrier.

4.2.1. Inability to understand learners' speech and signs

During the interviews, teachers B and C explained that they usually have difficulties to understand the learners' speech and signs as learners with HI have speech problems. The learners could not pronounce words very well. The teachers further explained that the learners' speeches are inaudible so much so that they have difficulties to understand them. One of the teachers narrated that:

“It takes time to move on from one step to another as I try to ask them what they mean. It is tough work as most of their speech and signs are hard to comprehend.” (Teacher B in school S on December 15, 2015)

This indicated that teachers find it a challenge to clearly understand what learners say and this consumes a lot of time during the learning process.

4.2.2. Lack of SL communication skills

Due to lack of training in SL, the teachers have problems to understand the learners' signs. They sometimes use signs that both the learners and the teachers could not understand.

4.2.3. Inadequate and lack of training in SL

Teachers in both schools confessed that they never had any SL training and that, this poses communication breakdown between the teachers and learners with HI.

The study has revealed that almost all teachers have not had any SL training and hence are not conversant with SL but they mostly use the oral method and simple signs they learn from the learners when they get stuck. The study also revealed that using Total Communication (TC), thus the use of speech and signs, which they said is hard as one cannot sign and speak at the same time as the two languages are different. This poses communication breakdown on both the part of both the teachers and the learners as they confessed that they have problems to understand the learners' speech and signs. They, however, expressed interest to learn SL so they could easily converse with the learners and understand each other better during lessons.

The study, furthermore, revealed that all teachers in both special and inclusive schools have no training in SL. The SL they use during lessons is learned from the learners to ease up communication breakdown. For example, the learners were made to look at pictures, visually explore objects 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 as well as understand their use. The importance of visual performance especially in relation to phonological awareness (as a method) was not exploited. Cunningham and 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 SL as the Malawian SL also exhibits variations at the phonological level and mostly in the hand shape parameters, variations of which are mutually intelligible. Similarly, the learners were made to read or write words without understanding the roots.

Some studies such as Cole (2008), and Cunningham and Allington (1999) have provided challenges affecting learners with special educational needs in general but, not those that are faced by learners with HI in particular. There is lack of political will in as far as the education of learners with HI is concerned and for all learners with special educational needs in the country as a whole which is evidenced by the number of Schools of the Deaf and that there is no Government School for such learners who would not benefit from the inclusive primary schools.

As teachers are not trained in SL, they lack the skill to communicate with the learners as most of the learners use SL and their spoken language is not understood by the teachers. The problem with Schools of the Deaf is that, they are 100 percent managed and taught by hearing teachers. This denies children with HI from having contact with adult role models with HI who would motivate them.

In schools of the Deaf it is important that educators with HI, who would be role models to learners with HI, receive a high level of teacher training and support with regard to how to teaching learners with HI (Johnson, Liddell, & Erting, 1989), citing;

“the best models of natural SL acquisition, the development of social identity and the enhancement of self-esteem for children with HI are signers who are Deaf and who use the language proficiently.” Johnson, Liddell and Erting 1989, p. 16).

4.3 Strategies suggested by the teachers that can be used to address the challenges faced by learners with HI in the learning process

When teachers were asked what strategies they use to address the challenges they come across when teaching learners with HI, teachers mentioned the use of gestures, signs and visual cues use Maternal Reflective Method, a skill that teachers imitate what mothers do to train children to speak, Catch and seize; a skill that a teacher uses to pick what the learner is interested to talk about. Once the teacher picks this up, s/he gets it as a chalkboard lesson and it becomes a source of information for the teacher to correct grammar; elaborate the topic for more understanding; use of Total communication (TC), this is the use of signs and speech at the same time; conversation, speech reading, speech drill, and memory training. Teacher A stated: “*I use gestures, signs and cues*” (interview with teacher in school R on December 14, 2015). On the other hand, Teacher B stated: “I use Maternal Reflective Method, Catch and seize,” (Interview with teacher B in school S on December 15, 2015) while Teacher C said, I use Total communication, conversation, speech reading, speech drill, and memory training” (interview with teacher C in school S on December 16, 2015). This helps learners to use their speech organs as they try to imitate what the teacher has said while signing at the same time.

To address the challenge of inability to understand learners’ speech and signs and lack of SL communication skills, literature such as Robertson (2009) suggests that teachers need to engage learners with HI in conversation, speech training and speech practice as well as putting melody bows in words which show where a word is stressed, they show the rhythm of the words; using chalk dust, paper strips and chicken feathers to show the differences in pronouncing words that have supra-segmental features and

look the same on the mouth. Teachers can also use drum beats and hand clapping. Furthermore, teachers added that they do take time to chat with the learners so they could learn the signs which the learners use and thereby easing the communication gap as this would equip them with SL communication skills they would require to understand and communicate with the learners effectively.

Teachers in the special schools and inclusive schools also suggested that they could request their head teachers to ask the Malawi National Association of the Deaf for SL Instructors to provide training as their counterparts in medical institutions and MACOHA CBR do to equip them with SL communication skills. This could help them to learn the skill and thereby easing the communication problems they always encounter.

To address the challenge of inadequate and lack of training in SL, the teachers suggested the need to be trained in SL as well as including SL in the teacher training curriculum, bearing in mind that after qualifying as specialist teachers of the Deaf, they will be dealing with learners who cannot hear and have speech problems to fluently speak orally. They also suggested that they would learn and practice the Manual Alphabet that is in learners' text books as this would help them to bring English words to the eyes of the learners with HI (Deaf).

4.4 Challenges faced by learners with HI in the teaching and learning Process

The teachers were also asked what challenges learners with HI faced in the teaching and learning process. The findings were that learners had problems to differentiate some syllables in the teaching and learning process. A good example that was given

was of learners' failure to understand some features of speech in syllables such as: 'fa' and 'va', 'ta' and 'da'; 'ba', 'ma' and 'pa' which are hard for them to differentiate as they look the same on the mouth when being pronounced. They also said if teachers kept beards that covered the mouth; learners always had problems to understand as they could not clearly see the lip movements of the teacher in the teaching and learning process. As earlier stated, learners with HI depend on vision to comprehend speech. With the teacher's mouth covered; learners have problems to understand what is being said. In the same way, some syllables are voiced while others are voiceless and they said they help the learners feel the vibrations or the air flow from the mouth for voiced and voiceless words respectively.

This poses a big challenge for learners to comprehend what teachers are teaching and excel in their learning process. One teacher explained that it is very hard work to help learners differentiate some words and syllables as they could not figure out how to do it.

4.5 Strategies that can be used to address challenges faced by learners with HI in the teaching and learning process

Teachers were further asked what strategies they used to address such challenges. They said that learners were encouraged to look at the teacher when s/he is teaching so they can easily see the difference in syllable and word pronunciation as well as feeling the vibration on the chin or the air flow on the mouth as in 'fa' and 'va', making use of such things as paper strips, chicken feathers or chalk dust to differentiate 'pa' and 'pha'. For 'ba', they could use a beating of the top of the desk, feeling of the cheek as in 'ma.' In the same way, teachers said they were advised by

lecturers during their training not to keep their mouths covered with beards and moustaches and that they should be clean-shaven. This could make their mouths visible for learners to see their lip movements. Sometimes the teacher and the learner would sit in front of the mirror so the learner can see the teacher's lip movements in the mirror and imitate. Sometimes teachers make their own means of making the learners differentiate and pronounce the words correctly, though others completely fail.

On the other hand, teachers said they use melody bows to help learners pronounce words and to know where to stress words when pronouncing them. Melody bows are curved lines drawn under a word to help learners how to pronounce different words. The curved lines show a deep curve or a deep 'v' where words should be stressed.

Teachers also explained that drum beats, hand clapping are used for the same purpose. Where a syllable needs to be stressed, the drum is given a loud beat. The same applies to the hand clapping. For the paper strip and chicken feather, the stress is seen when the strip or feather shakes from the air flowing from the mouth. To further address the challenges, the teachers explained that they use the Manual Alphabet to spell out words which learners were not able to understand as well as making use of speech training and speech practice.

4.5.1. Speech problems

The findings further revealed that learners have speech problems as they could not speak intelligibly and teachers used speech practice and speech training, by using chalk dust, chicken feather or paper strips held in front of the mouth to differentiate

words that look similar on the mouth. Sometimes learners could be taken to the speech room where the teacher and the learner sat in front of a mirror so that the learner could see the speech movements of the teacher in the mirror and imitate them.

4.5.2 Word pronunciation

In word pronunciation, the findings showed that the learners have problems to pronounce words as they should be. Learners could not pronounce words correctly due to their inability to hear the word sounds teachers also used melody bows as to how a word should be pronounced sounded as well as using drum beats, hand clapping, chalk dust, paper strips or chicken feathers.

4.5.2.1 Melody bows

Melody bows help learners to know where to stress words when pronouncing them. Melody bows are curved lines drawn under a word to help learners how to pronounce different words. The curved lines show a deep v where words should be stressed.

4.5.2.2 Drum beats, hand clapping, chalk dust, paper strip and chicken feather

Drum beats, hand clapping are used for the same purpose as where a word needs to be stressed the drum is given a loud beat. The same applies to the hand clapping. For the paper strip and chicken feather, the stress is seen when the strip or feather shakes from the air flowing from the mouth.

4.5.3 Seating arrangement

The study through the classroom observation further revealed that the seating arrangement in the school of the Deaf was good as it was in a horse shoe shape

enabling all learners to see their teacher while in the inclusive class, the learners were seated in rows facing each other and had to turn and follow their teacher's movements. This was not suitable for the learning environment of the learners with HI as they would require to be seated in front of the class to see the whole view of their teacher. On the other hand, the researcher noted with concern that the teacher in the inclusive class talked while writing on the chalkboard, moving around the class or facing the other way, hindering learners with HI from seeing the face of their teacher as the teacher mostly used speech. It must be pointed out that while hearing learners use the auditory channel to understand their teacher, learners with HI use the visual channel and would not benefit from sound.

It was apparent that this setting could have been altered to encourage a more interactive atmosphere during the exercises (Krashen, 2003). For instance, the researcher observed that those who sat in different rows had limited visual access to each other learners' utterances let alone the facial expressions and the signing. It, however, appeared that the teacher was not conscious enough of the need to plan for the learning environment to promote or enhance the learning of these learners with HI. This is a challenge that needs to be taken head on to ensure that learners with HI would also benefit from the country's education system if the Education for All (EFA) Goal is to be achieved. Revealed was the low level of subjects offered to learners in schools of the Deaf. As the literature indicates, this may be caused by 'The Cycle of Low Expectations' by educators. This cycle may stem from educators who view deafness as a deficit (Medical Model) and feel that children with HI cannot perform as well as hearing children. Johnson, Liddell & Erting (1989) notes that:

“If a teacher’s students fail to improve their writing and reading abilities, it is always assumed to be the result of inadequacies in the children or the general difficulty of teaching English to students who are Deaf. It is seldom suggested that the failure may actually result from a failure to communicate between teacher and the learners” (Johnson, Liddell & Erting, 1989:12).

Similarly, in Malawi, most learners with HI have challenges to access education because of the communication barrier between themselves and their teachers resulting in high failure rate. Teachers in the special school also said that another challenge is that, oftentimes, the schools usually lack funding or are underfunded to cater for the children as government funding is usually very minimal and it takes time for the schools to be funded. As pointed out earlier, the researcher recalls when primary schools for the Deaf were not opened six weeks into the term due to the fact that they were not funded while their counterparts in regular schools had already opened but they closed at the same time with those in regular primary schools. This permitted very little time for learning for these learners who require more time to understand and learn well. The Ministry of Education should ensure that these schools are adequately and timely funded as the regular schools.

It is crucial, therefore, that, as a strategy to mitigate this challenge, children with HI should not be seen as “defective models of normally hearing children” (Johnson, Liddell and Erting, 1989), rather as learners who are capable of achieving the same outcomes as hearing learners. Furthermore, it is important that educators of learners with HI should understand the need for change as their paradigm on deafness will have a direct and negative impact on how they view deafness and thus educate

learners with HI (ibid). It is cited by Naiker (2000) that many educators remain under the influence of the old paradigm, which makes it questionable if these educators understand the implication of the old paradigm and it requires making the shift to the demands of a more emancipated discourse. For instance, during the study, the researcher found the following in both special and inclusive schools as presented in the table below:

Table 2: A summary of the Comparison and Contrasting of the two settings

School of the Deaf	Inclusive school
1. Minimal use of SL 2. Mostly use oral method 3. Teachers have knowledge on how to communicate with learners with HI 4. Involvement of learners with HI was good 5. The classes have few learners which made it easy to involve them all and participation was fairly good 6. Seating arrangement is horse shoe 7. The teacher faced directly at learners when talking 8. Teachers used special teaching methods such as melody bows and speech reading skills 9. Teacher made use of teaching and learning aids 10. Teacher was talking to learners after writing on the chalkboard	1. No use of SL 2. Use oral method throughout 3. Teachers have no knowledge on how to communicate with learners with HI 4. Not much involvement of learners with HI 5. The classes have many learners and involvement of learners with HI was minimal 6. Learners are seated in a circle facing each other 7. The teacher was moving around the class while talking 8. Teacher never used special teaching methods no melody bows and speech reading skills 9. Teacher made use of teaching and learning aids 10. Teacher was talking to learners while writing on the chalkboard

As can be seen from the chart, at least teachers in the special primary schools have some SL communication skills and some teaching strategies on how to teach and communicate with learners with HI unlike their counterparts in inclusive schools. Inclusive schools have large classes compared to special schools which make teachers fail to individually attend to the learners' needs. The seating arrangement in inclusive school is also not good for learners who depend on vision to comprehend speech or lip-read.

4.6 How well teachers understood the learners when communicating with them during the teaching and learning process

The teachers were further asked to explain how well they understood the learners with HI when communicating with them during the teaching and learning process. The findings revealed that teachers in both schools have difficulties understanding both the learners' signs and speech as the learners have poor speech and their signs are sometimes confusing. Some of the signs the teachers try to create are not understood by the learners. Thus, both parties struggle to understand each other. Teacher A from the inclusive primary school R had this to say:

“Madam, it is hard work as I do not know SL but by using simple signs when I am teaching as well as using different resources for teaching during the lesson we tend to go on very well though it is hard to understand their speech and signs.” (December 14, 2015)

On his part, Teacher B in primary school S explained that:

“It is difficult but through patience and practice, communication with the learners is good. Though we are not allowed to use SL by the proprietors, I use it to help learners understand as they have speech

problems and cannot speak fluently even though I do not know SL much.” (December 15, 2015)

On the other hand, Teacher C in primary school S responded that, “But sometimes some signs are confusing to understand them.” (December 16, 2015).

These responses indicate that teachers have a tough time to make learners understand the lessons. This is because these learners first learnt to communicate as well as receive information through vision and speech is new and difficult for them. This echoes with what Taylor and Bishop (1991) reported to say:

“We met Deaf people with and without speech. Some sounded terrible.”
(Taylor and Bishop, 1991, p.55)

This indicates that, learners with HI have speech problems and their speech is not well understood and that anyone who is not a specialist teacher or does not have a relative who is Deaf can understand their speech. The researcher recalls the very first time she went for audiological testing at Montfort, she could easily see that the atmosphere was not normal as all the learners used their hands to communicate which at that time, she could pick neither head nor tail of what was happening.

4.7 How teachers involved the learners in the teaching and learning process

The teachers were also asked to indicate how they involved the learners with HI in the teaching and learning process. The evidence from the interviews and classroom observations show that learners were asked to put melody bows under words written on the chalkboard, repeat what the teachers said as well as practice pronouncing the

words written on the chalkboard. They were also asked to locate the words written on the chalkboard after the teachers read them out.

During the conversation lesson whose topic was ‘*Mayendedwe*’ (Means of travel), the teacher explained and discussed with the learners in a motherly manner what means of transport one would use to go to different places depending on the location. Then the teacher asked the learners:

“Ine kwathu ndi ku Mulanje. Pobwera kuno kapena ndikafuna kupita kumudzi, ndingayende bwanji?” (My home is in Mulanje. How could I travel when coming here or when going home?) (Teacher C at school S on December 16, 2015)

The teacher had a chart showing *ndege*, *bwato*, *sitima ya pa madzi*, *sitima ya njanje*, *njinga*, *galimoto*, *basi*, *ndi minibasi* (an aircraft, a canoe, a ship, a train, a bicycle, a car, a bus, and a minibus). She asked learners to point on the chart the means of transport she could use to travel home or back to her place of work. Learners raised up their hands to respond to the question and then responded and sign the article they pointed on the chart. One learner pointed at a bicycle. Then the teacher asked him: *Wakhoza ameneyu?* (Is he right?) The other learners signed an ‘X’ meaning he was wrong *Ku Mulanje umadziwako? Ndi kutalitu.* (Do you know where Mulanje is? It is far.) Then another learner pointed at a minibus. Immediately all learners signed a √ meaning he was correct. The teacher then commented: *Eya wakhoza! Tiyeni wawawawawaaaaaaa!* (Yes he is correct). Waving their hands in the air as that is what they do instead of clapping hands to acknowledge the achievement.

The teacher further engaged the learners in conversation, asking: *Kwa Kanje mumadziwako?* (Do you know where Kanje is?) All the children signed *Kumsika* (the Market). Teacher said, *Chabwino* (okay) “*Popita ku msika kwa Kanje mumayenda bwanji?* (How do you travel when going to Kanje market?). All learners raised their hands and the teacher chose one to point the means of travel to Kanje Market. In reply a child with HI pointed at a bicycle (*njinga*). Asking him further the teacher said “*Chimenecho ndi chiyani?*” (What is that?) In reply he just signed bicycle as he could not know the name ‘*njinga*.’ The teacher further asked him to say the name of the item he had pointed at and he said ‘*Sadziwa*’ meaning I don’t know and signed, “I don’t know” as he did not know the name of the item.

Other learners pointed at the minibus, others signed walking as most people do. Still others pointed at a bicycle. In response to that the teacher commented, *Eya, zoon.* *Ena amakwera minibasi kukatsika pa Turn off ndi kuyenda kukafika kwa Kanje. Ena amangoyenda pansi kuoloka Chisombezi popita ku msika kwa Kanje. Ena amapita pa njinga* (Yes, that is true. Some people board a minibus and drop at Turn off and then walk to Kanje Market, others just walk across Chisombezi River when going to Kanje Market. Others go on a bicycle.).

Along the same line, teachers were asked to mention the teaching and learning resources that they use to ensure their learners understand the content. The findings revealed that teachers use real objects where possible, drawings, pictures and charts.

4.7.1.1 Real objects

On one hand, real objects are used when teaching to help learners with HI and those without to understand better and fast. Some of the resources used are real objects. For example, when Teacher A was teaching parts of a plant, he brought with him a plant to class so as to help explain concepts. From the real plant, learners could see the tap root, the fibrous roots, the stem, branches, buds, leaves and flowers. This helped the teacher to explain to learners the uses of the parts of the plant. Thus, objects that can easily be found are used for lessons and give learners a concrete image of what the teacher is talking about. On the other hand, where required resources cannot be easily found, teachers said they use drawings of the objects which are well labeled to help learners understand the concepts.

Furthermore, teachers use pictures from books, newspapers and magazines during lessons to emphasize or clarify points. Charts are also some of the key resources used when teaching learners with HI, the classroom observations showed that the teacher used a chart on which she drew several means of transport from which the learners had to choose the appropriate means of transport to wherever the teacher asked. The only problem was learners' failure to understand what the teacher meant and ended up choosing the wrong means of transport.

4.7.1.2 Drawings

Where required resources cannot be easily found, teachers use drawings of the real objects that are well labeled to help learners understand the concepts.

4.7.1.3 Pictures

Sometimes teachers use pictures from books, newspapers and magazines.

4.7.1.4 Charts

The classroom observations showed that the teacher used a chart on which she drew several means of transport from which learners had to choose the appropriate transport to wherever the teacher asked. The only problem was the learners' failure to understand what the teacher meant and ended up choosing the wrong means of transport.

During the observation it was noted that the learners knew the items but not know their names but just signs. The teacher further engaged the learners in word pronunciation. She wrote the words; 'njinga' and 'minibasi' and asked them to repeat after her. Later she asked them to put melody bows in the words after she had pronounced each word, thus ' - *nji-nga*, *mi-ni- -ba-si*' Learners then drew melody bows in the two words that showed the correct places where the words were stressed, thus ' - *-nji-*' and ' - *-ba-,.*' Turnbull & Turnbull pointed out that instruction that emphasizes the visual medium helps children with HI to understand and remember information. Turnbull & Turnbull (2006) further quoted Moores (1999):

“Which enabling and less restrictive setting: general classrooms, special education classrooms in public schools, or schools of the Deaf? Virtually all professional and parent organizations involved in the field of deafness recently issued a statement regarding the maintenance of maintaining a spectrum of educational options for children who are Deaf or HH.”

Turnbull and Turnbull (2006, p.645)

4.8 Chapter Summary

The chapter has described the finding and discussions of the study. The findings revealed that teachers use real objects, drawings, charts and pictures to help learners understand the concepts in the lessons. This shows that learners understand well when they are provided with real life situations during the teaching and learning process. Thus, teachers used different approaches in helping the learners to pronounce words as well as help them understand the concepts from real things and abstract things as they made explanations easier for the learners' understanding what was really meant. The last chapter provides the conclusion, implications and recommendations.

CHAPTER FIVE

CONCLUSION, IMPLICATIONS, AND RECOMMENDATIONS

5.0 Chapter Overview

The chapter gives a summary of the research study. It has explored how learners with HI (Deaf or HH) are taught and how SL is used in the teaching and learning process in special and inclusive setting. The research has found out that, mostly, teachers use the oral method with very minimal use of SL in special schools and teachers in the inclusive school use pure oral resulting in both learners and teachers ending up not understanding each other and ultimately, the learners' failing examination.

Chapter four has presented the findings and discussion of the study. This chapter discusses some of the conclusions that can be drawn from the findings of the study based on the research questions. The chapter also discusses the implications and recommendations. Finally, the chapter makes suggestions on areas for further study on the conclusions.

5.1 Conclusion

In conclusion, it is worth pointing out that, schools of the Deaf and mainstream schools throughout the country in their current form are contrary to the spirit of inclusion because they neither have teachers with HI who would help prevent barriers to learning and development and would act as positive role models for learners with HI. This language barrier prevents learners with HI from having equal access to

education as that which is offered to learners without HI provided in the mainstream schools. This is because teachers in both special and inclusive schools are all hearing and not conversant with SL and learners with HI are being asked to learn to speak before mastering the use of SL. Again, the teachers appear to lack interest in learning SL. Thus, teachers in both special and inclusive schools need to have SL communication skills that would enable them to effectively communicate with and accommodate all learners regardless of their shortfalls. As they are now, they do not provide learners with HI access to SL as well as Deaf role models both of which are crucial for their social, emotional and educational development.

The research established that teachers in the Schools of the Deaf are all hearing as no teachers with HI are included in the teaching of these learners with HI and given the necessary training so they could easily communicate with learners with HI. This makes the teachers without HI reluctant to learn and use SL for teaching learners with HI in Schools of the Deaf. It has also been concluded that teachers in both special and inclusive schools are not conversant with SL. It needs to be made explicit that an inclusive education approach is not only aimed at learners with disabilities or special needs but rather at all learners. There are learners who experience barriers to learning caused by “children living in poverty, children from ethnic and linguistic minorities, girls (in some societies), and children from remote areas and so on” (UNESCO, 2002).

The research established that mostly teachers in both schools use the oral method but it is minimally used in the special school. They usually communicate with the learners orally although the learners have intelligible speech. In both schools the main

challenge that teachers face is communication breakdown as they are not conversant in Sign Language. The strategies teachers use in addressing the challenge is to make use real objects when teaching and use the chalk-board to communicate. Learners have speech problems and have problems to understand their teachers due to the fact that they do not hear. To address challenges faced during the teaching and learning process, teachers try to engage the learners in conversation. However, teachers and learners have problems understand each other due to the communication barrier as neither of them is able to fully understand the other as the language they use is different.

5.2 Implications

Placing learners with HI alongside their hearing counterparts in the inclusive mainstream classrooms may cause challenges to the teaching and learning process, learning environment and development if teachers are not conversant in SL. Both teachers and learners would not understand each other if teachers are not given training in SL and that learners with HI would find it hard to go up the education ladder and become self reliant in their future lives. Lack of SL communication skills has negative effects on the learning process of these learners as it causes communication breakdown and exclusion. Thus, if the system fails to meet the different needs of a wide range of learners or if problems arise in any of these components, the learner or the system may be prevented from being able to engage in or sustain an ideal process of learning. Despite there being a call for inclusive education, it is worth pointing out that some learners would not benefit from the inclusive education system as they would require specially trained teachers on how to teach learners with HI and have SL communication skills.

5.3 Recommendations

Looking at the challenges both teachers and learners with HI face during the teaching and learning process, it is, therefore, crucial that schools of the Deaf should take proactive steps in transforming their schools into SL medium education facilities if they provide learners who are Deaf with access to education in the language of their choice, namely Malawian SL, learners who are Deaf will have access to the education similar to that which is offered to hearing learners. Similarly, it is argued that knowledge of language permits learning as all learning processes require the use and knowledge of language (Storbeck, 2004). Use of SL seems to be done due to the fact that training institutions and schools follow the clinical-pathological paradigm/medical model where SL is not considered as a fully-fledged language of the Deaf, but rather, a remedial measure used to communicating with learners with HI which should not be the case. SL is a language in its own right, complete with grammar and syntax that teachers need to learn if they choose to teach Deaf learners. Government should therefore support this initiative to ensure that all learners receive education through a language they would understand. It would therefore be important if:

1. SL training could be offered in the special and regular institutions so that it should be customized to the level of the specific SL techniques. Those educators who are not fluent in SL need to attend compulsory SL classes provided by MANAD SL instructors to be fluent in SL and educators of the Deaf need to be “fully acquainted with the Deaf culture” (UNESCO, 1999, p.29).
2. Creation of awareness on Malawian SL should be given to all the stakeholders in education, in the company of the Malawi National Association of the Deaf

who are very much conversant in SL, so that the diverse needs of these learners may be taken into consideration. Teachers in special and regular schools should be given refresher courses on how to handle learners with HIs and communicate well with them to ensure that all learners would benefit from the country's education system to accommodate all learners, bearing in mind that, the country is moving towards inclusive education.

3. All education managers, educators, the whole education system needs to be trained and be fluent in Malawian SL in order to effectively assist all learners with HI. Formation of an association of teachers of learners who are Deaf in Malawi can also play a major role in educating the society on the use of Malawi SL.
4. Malawi National Examination Board (MANEB) Staff should be trained in SL so as to offer examination in SL as well as have markers who would be transcribing hearing impaired candidates' examination scripts just like they do with learners with visual impairment (Blind) and that their scripts be packed separately for easy identification as it is done with Braille.
5. There should be unified SL assessment criteria, which could be developed and used in interviewing processes for all schools of the Deaf and that all educators of the Deaf need to acknowledge that the "first language of Deaf children should be natural SL" (Johnson, Liddell & Erting, 1989 p15) and that any teacher from the TTC should be given a pass if she/he has mastered SL.

All education stakeholders therefore, need to join hands in the education of learners with HI in order to uplift the lives of this minority group of people for them to reach their full potential for them to become literate and take on

responsible jobs for self-supporting. It is further suggested that the recommendations be used to ensure learning takes place and that both teachers and learners would understand each other during the teaching and learning process to ensure a systematic communication occurs, learning takes place and that no child is left behind.

Thus, these recommendations if adopted by teachers, educators and policy makers would help improve the education of learners with HI in Malawi. For example, their knowledge of SL would help to close the communication gap among learners with HI, their teachers and peers. This will help to create a welcoming and inclusive learning environment among all learners. If teachers are conversant in SL, they will motivate hearing learners to learn it and they would be of great help to their peers with HI which would ease their work of explaining concepts during the teaching process, group discussions, and pair work. On the other hand, it would be commendable if Malawi National Examination Board (MANEB) officials and all those involved in the teaching, formulating, and marking of examinations, be oriented on the needs of candidates who are Deaf.

Teachers should be knowledgeable to handle all learners with HI as they will be found in regular schools. Their knowledge of SL would help to close the communication gap among learners with HI, their teachers and peers. This will help to create a welcoming and inclusive learning environment among all learners. If teachers are conversant in SL, they will motivate hearing learners to learn it and they would be of great help to their peers with HI which would ease their work of explaining concepts during the teaching process, group discussions, and pair work. On the other hand, it would be

commendable if Malawi National Examination Board (MANEB) officials and all those involved in the teaching, formulating, and marking of examinations, be oriented on the needs of candidates who are Deaf in the same way it is done for learners with visual impairment (the blind) whose scripts are written in Braille and are later transcribed by teachers of the Blind who are able to read and understand Braille. This will enhance the education and performance of Deaf learners. Thus, a learner with visual impairment (Blind) cannot be taught to see, but can hear, speak, and uses Braille when writing, while a Deaf learner cannot be taught to hear and speak considering how children learn to speak and when one became Deaf.

A Deaf learner can see like a normal person but cannot communicate orally; the same should apply to the Deaf as it is applied to learners with visual impairment (Blind) and that they are allowed to be taught through the use of SL. Deaf learners' examination scripts need to be identified as is the case with learners with visual impairment bearing in mind that, these learners cannot speak and write fluently as those with visual impairment and their hearing peers. Deaf learners write their sentences in the same way they do when signing with grammar so different from the English Grammar.

Deafness is an invisible disability where one looks normal that nobody can easily tell a person has a disability. They can see but cannot hear or speak with no knowledge of the sound that goes with speech. Loss of hearing closes one to sound, a vital sense that brings on speech and on what is taking place in the environment. All teachers in both special and inclusive schools need to learn SL in order for them to be able to

communicate with and effectively teach learners with HI (Deaf or HH) for their successful education. The Salamanca Statement clearly states,

“Education policies should take into account of individual differences and situations. The importance of SL as the medium of communication among the Deaf, for example, should be recognized and provision made to ensure that all Deaf persons have access to education in their national signed languages.” (UNESCO, 1999, p.18).

5.4 Areas for further research

It is crucial that ongoing research be conducted with regard to deaf learners in areas such as:

- Literacy and language development, facilitating a smooth transaction between school and the work environment, inclusion, internal motivation.
- The use of different kinds of technology that might facilitate the education of deaf learners.
- An up-to-date review of the different approaches to Education of the Deaf, for example, the successes and failures of using the aural and spatial modalities in providing Deaf learners with equal access, and the extent to which each modality constitutes a barrier.
- The issue of rights, specifically whether the learners’ right to equal access may be overridden by other rights and other important areas.
- SL grammar and creation of signs for communication.

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APPENDICES

Appendix 1: DATA COLLECTION TOOLS

Appendix 1A: Observation Schedule

1. Observation schedule

School Code:.....

Date of observation:.....

Subject:.....

Lesson:.....

Number of learners who are Deaf and HH:.....

Total number of learners:.....

Planning	
Teaching strategies	
Use of T/L Aids	
Use of SL	
Questioning Techniques	
Learner involvement	
Teacher-Learner interaction	

Appendix 1B: Interview Schedule

Bio-data

Range of academic qualification:.....

Range of professional qualification:.....

Number of years of service:.....

Number of years in a position:.....

Teaching and Teacher Professional Development:.....

1. How do you communicate with learners who are hearing impaired (Deaf and HH?).....
.....
.....
2. What educational and communication methods do you use to communicate with these
3. learners?.....
.....
.....
.....
4. How well do you understand these learners when communicating with them during the teaching and learning process?.....
.....
.....

What strategies do you use when teaching other learning areas?.....

.....

.....

.....

.....

5. What language do you use to communicate with them and how well do you understand each other?.....

.....

.....

.....

.....

.....

6. Do you understand your learners when they use SL?.....

.....

.....

.....

.....

7. Are you conversant with SL?

8. If yes, did you undergo any SL training course? If no, how do you manage to communicate with your learners?.....

.....

.....

.....

9. What teaching and learning resources do you use to ensure your students understand the content?.....

.....
.....

10. What other communication skills do you use when teaching?.....

.....
.....
.....

11. How long have you been teaching these learners and what challenges do you experience?.....

.....
.....

Thank you for your time and patience to answer these questions

**Appendix 2A: Letter of introduction from the Dean of the Faculty of Education
the University of Malawi, Chancellor College**


CHANCELLOR COLLEGE

Principal: Richard Tambulasi
B.A (Pub Admin), BPA(Hons) MPA, PhD

P. O. Box 280, Zomba, MALAWI
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bchulu@cc.ac.mw

OFFICE OF THE DEAN OF EDUCATION

17th December, 2015

TO WHOM IT MAY CONCERN

Dear Sir/Madam

LETTER OF INTRODUCTION (MASTER OF EDUCATION)

The Faculty of Education would like to introduce to you Ms. Gloria Kampondeni, Registration no. MED/PR/LIT/14/14, Chancellor College M.Ed Student who is supposed to do research in area of her interest.

This letter serves to request you to assist her with data collection in your zone.

The Faculty of Education will appreciate your support in this very important aspect of our students' training.

Yours faithfully,

 F. Kholowa, (PhD)
DEAN OF EDUCATION

cc: Supervisor

UNIVERSITY OF MALAWI
CHANCELLOR COLLEGE
2015-12-17
DEAN
FACULTY OF EDUCATION

Appendix 2B: Letter of permission to conduct the research from the District Education Manager

In reply please quote our ref
REF. CZ/DEM/ 11/3
0888863359



The District Education Manager
P. O. Box 29
Chiradzulu.

01 /02/2016

TO WHOM IT MAY CONCERN

The bearer of this letter is Ms. Gloria Kampondeni, registration number MED/PR/LIT/10/014 is a Chancellor College M.E.d student. She would like to conduct a research in education issues.

Our office has granted her permission. Therefore assist her accordingly.

A handwritten signature in blue ink, appearing to read 'H. C. Kachale'.

H. C. Kachale
DISTRICT EDUCATION MANAGER

