

**An Evaluation of Classroom Support Given to Learners with Hearing Impairment in
Mainstream Schools: A Case of Selected Primary Schools in Mzimba.**

BY

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(MEDTE 1121)

A thesis submitted to the Faculty of Education in partial fulfillment of the requirements for
the degree of Master of Education in Teacher Education

AT

Mzuzu University

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DECLARATION

I, Atupele Zidana, hereby declare that this thesis titled "An Evaluation of Classroom Support Given to Learners with Hearing Impairment in Mainstream Primary Schools" is my own original work and has not been submitted previously, in whole or in part, for any academic award at any other institution.

All sources of information and data used in this thesis have been acknowledged through proper referencing, and the work is fully compliant with the academic integrity standards required for the degree of Master of Education in Teacher Education.

I further declare that ethical considerations have been adhered to in the conduct of this research, and all necessary approvals and consents were obtained from relevant authorities and participants.



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15/04/2025

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Thank you all.

DEDICATION

To the resilient learners with hearing impairment, whose spirit and determination inspire us all. Your journey in the realm of education serves as a powerful reminder of the importance of inclusivity and understanding in our classrooms.

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ABSTRACT

The study evaluates classroom support given to learners with hearing impairment in mainstream primary schools in Mzimba. The study was set under four objectives and the first objective was to identify types of support given to learners with hearing impairment during teaching and learning in mainstream classrooms. The second objective sought to examine how specialist teachers complement regular teachers in supporting learners with hearing impairment in mainstream classrooms during teaching and learning process. The third objective was to investigate the extent to which learners with hearing impairment participate in mainstream classrooms during teaching and learning. Lastly, the study sought to examine experiences of HI learners, challenges and opportunities for their development in mainstream schools.

A case study design was adopted using qualitative research design. Qualitative and quantitative data was collected using unstructured questionnaire, focus group discussion and direct observation. Qualitative data was analysed using NVIVO and presented using Thematic Analysis.

The findings reveal a mixed picture of classroom support. While some inclusive strategies such as peer support, use of visual aids and front seating arrangement were observed, there was a significant lack of key elements essential for effective inclusion. These include limited teacher proficiency in sign language, in adequate use of assistive devices like hearing aids and minimal collaboration between specialist and regular teachers. In many classrooms, learners with HI were found to be passive participants due to communication barriers and large class sizes, which hinder teacher learner interaction and personalized support.

The study concludes that while inclusive education policies are in place, their implementation remains inconsistent and under resourced. It recommends targeted teacher training in sign language, provision of specialized teaching and learning materials, strengthening of collaborative

teaching approaches and greater investment in inclusive infrastructure and resources. The findings have implications for policy makers, teachers and stakeholders aiming to advance inclusive education in Malawi. By addressing the existing gaps, the education system can move closer to achieving equitable and quality education for all learners in line with the Sustainable Development Goals and national education policy frameworks

Key words: Hearing Impairment, Learners, Mainstream, Specialist Teachers, Ordinary Teachers

LIST OF ACRONYMS AND ABBREVIATIONS

HI:	Hearing Impairment
BATOD:	British Association of the Deaf
UNESCO:	United Nations Educational, Scientific and Cultural Organisation
EMIS:	Education Management Information Systems
SEN:	Special Education Needs.
SNE:	Special Needs Education
IE:	Inclusive Education
SDG:	Sustainable Development Goals

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

Inclusive Education (IE) is a concept that has swept across the globe as a means of advancing sustainability. A global overview of IE has shown that IE largely focuses on the education of individuals with additional support needs, more specifically persons with disabilities. IE can be traced as far as the 18th Century, but it made its presence known in the middle to late 1900s. However, IE has been previously dominated by additional support for persons with visual disabilities. The Renaissance period saw the education of persons with hearing impairment coming to light and it was not until the middle 1950s that the education of persons with hearing impairment gained momentum with the establishment of special schools for the hearing-impaired in France and the United States (O'Neill & Marcharck, 2013).

The shifting of focus from the environmental access barriers and socio-cultural factors as the major factors impacting on Hearing Impaired (HI) students' academic performance to linguistic access has revealed an enormous problem that deaf children face in accessing teaching discourse (Knoors & Marschark, 2012). In England, and the rest of Europe, studies have shown that the major obstacle HI students face within the learning environment lies within the support being given to learners with hearing impairment (Mann et al., 2013; NDCS, 2015). It is for this reason that this study sought to evaluate the support that is given to learners with hearing impairment in mainstream schools during the process of teaching and learning in mainstream classroom. Therefore, this chapter presents the background information, statement of the problem, objectives, research questions and significance of the study.

1.2 Background to the Study

Special Needs Education (SNE) for learners with Hearing Impairment (HI) in Malawi began in

1968 at Montfort campus in Chiradzulu district by the Fathers of Immaculate Conception of the Roman Catholic Church. Since its commencement and the establishment of other schools by church missionaries, including the Church of Central Africa Presbyterian (CCAP), education was being provided through special schools. A few decades later, resource centres within selected mainstream schools also opened to cater for increasing number of learners with other disabilities that could not be accommodated in the special schools due to the nature of their disability and also shortage of space in the few special schools that were there. However, as the world is moving towards inclusion, learners with hearing impairment are attending schools that are within their localities in a system called Inclusive Education (IE). Schmidt and Cagran (2008) believe that when learners with SEN are provided with appropriate support in an inclusive setting, they are able to develop a more positive self-concept.

Special Needs Education therefore has become part of inclusive education so that it caters for the needs of learners with severe and profound degrees of hearing impairment (Deshpande, 2013). Learners with higher degrees of impairment require special needs services such as specialized resources like sign language, specialized teaching and learning resources and specialist teachers, for them to be able to access quality education just like any other learner. Although this is the case, Malawi's policy on Special Needs Education outlines the major constraints to the effective implementation of SNE services. This includes lack of enough space to accommodate learners with profound and severe levels of hearing impairment. This has forced many of them to enroll in the inclusive settings. Other constraints include insufficient funding, environmental barriers, attitudinal barriers, and limited capacity of teachers (SNE policy, 2007). It is therefore obvious that in order to achieve successful inclusive education, Malawi will need to address the critical challenges affecting SNE services at the grassroot level.

In order to progress in the provision of IE, Malawi is a signatory to several world declarations and has put in place policies that aim to provide equal educational opportunities to all learners. Such commitments include pledge to the Salamanca Statement (1994), which advocates for inclusion of learners with disabilities in the mainstream schools, including those with hearing impairment (Emanuel, 2015).

As a step towards creating inclusive classrooms, the Malawi Government developed a Policy Investment Framework (PIF, 2001), which specifies the country's commitment to quality education for all. The PIF states that Malawi will commit to the reduction of inequalities in the schools across all the regions by, amongst other factors, providing an enabling environment for learners with SEN (Ministry of Education, 2009). These efforts demonstrate the country's cognizance of the need to create an inclusive society and achieve international targets such as the Millennium Development Goals (MDG) of universal primary education and Education for All (EFA) goals.

Inclusive education, according to Pinnock and Lewis (2008), assumes that:

- All schools shall be made welcoming to all learners in terms of environment.
- There shall be suitable teaching and learning resources for all learners.
- Teachers have skills to be able to handle an inclusive classroom.
- There is respect for diversity and no discrimination, isolation or stereotyping.
- Education structure, systems and methodologies meet the needs of all children.

1.3 Statement of the Problem

The Malawi national statistics figures based on EMIS (2017) show that out of 69,983 learners with SEN enrolled in mainstream schools, 18,980 have hearing impairments. Learners, especially those with severe and profound levels of impairment, are however enrolled in special schools. Often used synonymously with Deafness, Hearing Impairment (HI) is a heterogeneous condition with far-reaching effects on social, emotional, and cognitive development and it reportedly affects about 15–26% of the world's population, with the highest prevalence in low-income countries like Malawi (Fellinger et al., 2012). Classification of hearing loss and/or impairment is normally based on whether it is conductive- a temporary hearing loss that can be easily treated; sensorineural deafness resulting from damage to the inner ear and auditory nerve cells; congenital deafness, where the hearing loss/impairment is present at birth or whether there is hearing loss in one ear or partial hearing in both ears (Unilateral/bilateral deafness) (NDCS, 2015).

These classifications are made apparent by the level of hearing loss/impairment in each ear, that is, whether the level of hearing loss/impairment is mild such that an individual can hear sounds between 20 and 40 decibels (dB) without the use of hearing aids, or a moderate level of 41-70 dB as well as severe impairment (71-95 dB) and a profound level (beyond 95 dB) of hearing loss, where a person may hear background noise, for instance, a truck passing by and yet not be able to hear a phone ringing (NDCS, 2015). It is worth noting that there are two contrasting terminologies when referring to hearing-impaired individuals. The first term is 'Deaf' and it encompasses people who prefer to communicate in sign language and consider themselves a language minority, while the second term 'deaf' refers to people who are hard of hearing, use hearing aids, and have spoken language as their preferred mode of communication (Thorley, 2015).

Malawi as a country does not have enough special schools to accommodate all of such learners. As a result, a good number of them still attend mainstream schools. Attending mainstream schools on the part of students with special needs is what is encouraged in the era of inclusiveness, as long as such students receive the necessary support that ensures the quality of the education they receive.

Malawi is also a signatory to many declarations such as the Salamanca Declaration of 1994, where governments agreed on a dynamic new statement on the education of all children with special needs, which called for inclusion to be the norm. The conference adopted a new framework for action that ordinary schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic, or other conditions. It also stipulates that learners with disabilities attend the neighborhood schools that would be attended if the child did not have a disability. The Salamanca Declaration begins with a commitment to education for all. Although this is the case, provision of education to learners with hearing impairment remains inadequate (Kamchedzera et al., 2017).

The main mode of teaching in Malawi especially in primary schools, is through spoken language. A teacher delivers lessons to the class by speaking so that the learners hear and understand the subject matter. This means that where a learner cannot hear or speak, the learner may face challenges because they are learning in a language that they do not understand. Learners with hearing impairment, especially those with range from severe to profound levels of impairment, use sign language as a mode of communication. Though this is the case, a lot of teachers do not know sign language and may consequently not be able to communicate with learners with these degrees of impairments.

Experience shows that learners with special needs, including those with hearing impairment, are still able to pass school-based examinations and graduate from one class to another on merit. This implies that there must surely be some kind of support that is given to such learners that enable them to excel academically, although often with struggles.

Although Chimeza and Pertersen (2003) acknowledge that many studies are being conducted on learners with various challenges across Malawi, the researcher's existing knowledge on special needs and inclusive education issues suggests that very little is being done specifically targeting learners with hearing impairment and the support that they are receiving in the process of teaching and learning.

Therefore, this research aimed at evaluating the support that learners with hearing impairment receive during the process of teaching and learning in selected primary schools in Mzuzu City. This will bridge the knowledge gap on whether learners with hearing impairment receive appropriate and adequate support as they learn in a mainstream setting, considering that they definitely need some special kind of support for them to learn just like any other learner taking into account their learning needs brought about by their disability.

1.4 Aim of the Study

The main aim of this research study is to evaluate the support being given to learners with hearing impairment during teaching and learning process in mainstream classrooms.

1.5 Specific Objectives

The study was conducted based on the following specific objectives:

1. To identify types of support given to learners with hearing impairment during teaching and learning in mainstream classrooms.

2. To examine how specialist teachers, complement regular teachers in supporting learners with hearing impairment in mainstream classrooms during teaching and learning process.
3. To investigate the extent to which learners with hearing impairment participate in mainstream classrooms during teaching and learning.
4. To examine experiences of HI learners, challenges and opportunities for their development in mainstream schools.

1.7 Significance of the Study

The findings from this study are useful in numerous ways. First, the study is expected to add knowledge to existing literature about support for learners with HI in mainstream settings. In addition, the study provides empirical information for Malawi as well as guides educators about the learning experiences and challenges that learners with HI face. Furthermore, the study is expected to inspire further studies by scholars in the field of inclusive education to help learners with HI and all other disabilities to have equal access and quality education which is important for achieving academic success. More significantly, the study seeks to inform policymakers on the significance of advancing Deaf Education following the Sustainable Development Goals.

1.8 Study Schedule

After looking at chapter one, what follows is chapter two in which there is a conceptual and theoretical framework, definitions of key concepts and literature from across the globe is reviewed. In chapter three, there is a methodology in which data collection and data analysis are discussed. Sample size, population, pretest and place of study. Reliability and validity that affect this study have been discussed. There is also a discussion on ethics. In chapter four, data is presented and discussed. Lastly, chapter five summarizes the study, recommendations are provided and areas for further studies are also provided. Below is a table presenting the outline of the research study.

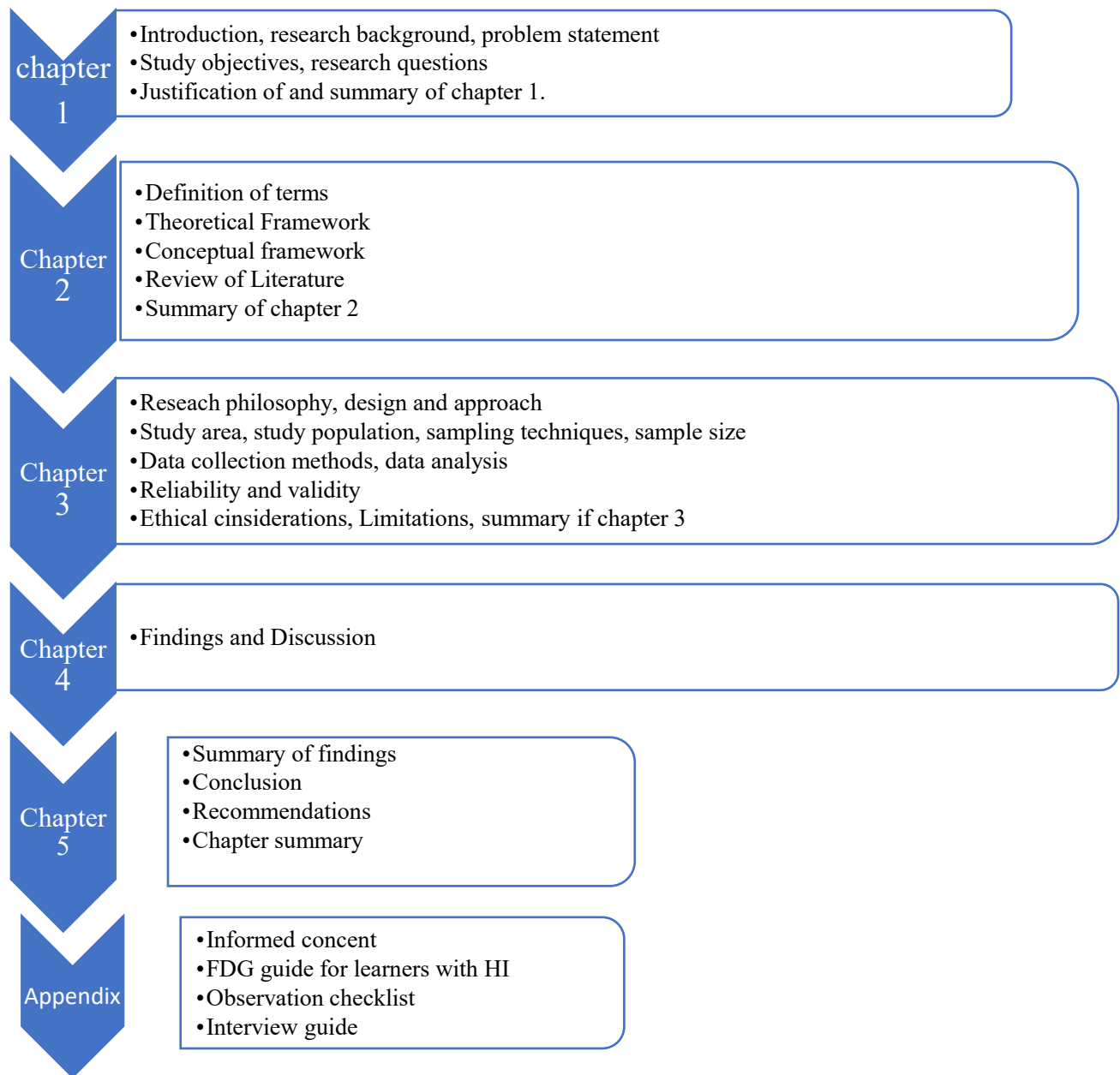


Figure 1 Study Outline

1.9 Chapter Summary

In summary, this chapter provides a discussion of the type of research to be conducted. The background to the study provides a historical overview of IE and the education of persons with disabilities. The problem statement provides clear insight of why the research needs to be conducted and the aim of the research in question. The study is of great benefit as it will identify effective support methods for enhancing the participation of learners with hearing disabilities.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The past decades have seen a rise in research on various approaches to the inclusion and teaching of hearing-impaired pupils within mainstream schools as a result of the need to implement the inclusive education policy (Davis & Florian, 2004; Easterbrooks & Stephenson, 2006; Luckner et al., 2012; Marschark et al., 2011; William & Mayer, 2015). Moreover, the rise in disability and humanitarian movements has drawn attention to the need to recognise individual differences and promote development through collaborative working with individuals with additional support needs (BATOD, 2011; NDCS, 2015; Papworth Trust, 2013). The research into the education of learners with hearing impairment has of late focused mostly on linguistic access of the deaf and hard of hearing (DHH) child within the mainstream class as part of bridging the communication gap between the hearing-impaired students and their hearing peers (Antia et al., 2010; Parton, 2014; Spencer & Marschark, 2010) and enabling the hearing-impaired students to become fully integrated within the school environment.

In Malawi, mainstreaming has been used as an approach to the process of inclusion (Sharma, 2005; Tungaraza, 2010). It is a struggle to eliminate segregation in education and society at large. NIACE (1992) stipulates that segregation in education meant exclusion from the mainstream in separate settings without a time limit or an integration plan. Additionally, it is an education under separate management from the mainstream such as a special unit in a regular school. According to the description above, special schools and special units in ordinary schools provide segregated education. Discrimination of learners during teaching and learning due to their disabilities can also be identified as segregation. Mmbaga (2003) argues that with globalization, the concerns of

inclusion are taken into account, making it a globally acceptable practice in education. It is believed that implementation of IE should lead to the improvement of learners in schools, resulting in the elimination of segregation of children (UNESCO, 1994). Inclusive education is a means to facilitate a change in the discriminatory or segregation attitude of members of society, starting with the classroom environment (Thomas, 1997). Moreover, segregating children in the education system due to difficulties they experience in learning could be reduced through inclusion orientation. Inclusion supports the elimination of all segregation in education based on disability, and hearing impairment in this case. All countries are required to adopt inclusive policy as a commitment to the elimination of segregation of children in education. As well as promoting equal opportunities, ending of segregation in education is perceived as human rights issue.

2.2 Definition of Terms

Two consecutive terms are being discussed in this study and they include:

2.2.1 Hearing Impairment

This is the medical term given to an individual who has permanent or temporary hearing loss caused by both internal and external factors such as medical conditions and accidents. HI is often used synonymously with the word “Deaf” in many academic research studies (O’Neill & Marschark, 2015).

2.2.2 Inclusive Education

There have been several definitions of inclusive education based on context and region. However, the key message is that Inclusive Education is the name given to the concept where all learners regardless of disability, background, individual differences learn together within the same

academic settings and receive the same education benefits on equal basis with others (Florian, 2014).

2.3 Theoretical Framework

Teaching and learning are social constructs that require social interaction between the learners, teachers, peers and the community. In this view, the study applied the socio-cultural learning theory.

2.3.1 The Socio-Cultural Learning Theory

The socio-cultural theory grew from the work of psychologist Lev Vygotsky who believed that parents, caregivers, peers and culture at large are responsible for developing higher-order functions. According to Vygotsky (1987), learning has its basis in interacting with other people. Once this has occurred, the information is then integrated on the individual level. This theory was employed as the theoretical framework of this study to explore the participation and interaction of students with hearing impairment in mainstream settings. This theory indicates that social interaction leads to cognitive development.

2.3.2 Vital Components in the Socio-Cultural Learning Theory

Zone of proximal development

An important concept in Vygotsky's socio-cultural theory is known as the zone of proximal development. According to him, this is the distance between the actual development levels of the learners determined by independent problem solving and the level of potential development as determined through problem solving under the support of an adult or in collaboration with more capable peers (Vygotsky, 1978). Particularly the collaboration and interaction with more capable peers is an effective way of developing skills and strategies. This theory, specifically the concept

of zone of proximal development, emphasises that teachers in the classroom are responsible for structuring interactions between students.

In this study it means between learners with hearing impairment and with normal hearing, learners with hearing impairment can benefit a lot from hearing friends since they (HI) have limitations on ways how to understand a concept especially where hearing becomes the main way of communication. Teachers also are responsible to guide the learners through tasks associated with learning concepts (Chibwe, 2013). It will be very important to see how learners with hearing impairment participate and interact with hearing students in mainstream classrooms. It will also give room to learn how the teachers provide a conducive learning environment through various teaching methods and the use of suitable teaching and learning materials that allow all the learners, specifically those with all degrees of hearing impairment, to fully participate.

Guided participation

According to Vygotsky (1978), the most important learning in people's lives happens in collaboration with the important others. Thus, in socially assisted learning, where the important others who are already competent participants in the adult cultural community guide and support the children's development within the same community. Rogoff (1990) and Lave and Wenger (1991) say that it is through guided interaction that development happens. This does not mean that children's initiative is less important, but that without support from a sensitive caregiver, the child's development has a limit as to where it can go (Hundeide, 2003, p.62). To avoid a situation where the child's own initiative and independence are undermined, Hundeide (2003) suggests the use of *scaffolding* or *graded support*. Here the teacher takes basis in the child's positive initiative and

support these in the degree where there is a need for that and with emphasis on the pupil's experiences that he/she has the responsibility of mastering the skills himself/herself.

The teacher has a decisive role in the early phase of skills mastering in the pupils, but later sensitively adjusts the support in response to the child's level of skills and the tasks' level of difficulty. This type of support is the best strategy that gives long-term results to pupils because what is supported is the child's initiative, understanding and autonomy. Guided interaction by Hundeide (2003) is what Rogoff (1990) refers to as guided participation. According to Hundeide (2003), a teacher will lend various levels of assistance over various interactions of task completion depending on various factors. These factors may include the learner's needs that may be unique due to disability. Learners with hearing impairment need more guidance from the teacher to be able to understand concepts. The teacher may need to speak more loudly with a lot of gesture as well as being there to ensure that the learner is following when a task is given.

Learning from concrete to abstract

Another important component in Vygotsky's theory is that children should learn from simple to complex material. This means that a teacher in an inclusive setting that has learners with HI must work with pupils within their actual development zone, and then moves the child forward by working within the zone of proximal development. The pupils are supposed to develop mastery in the area of concern before they are introduced to the next level of complicity. That is to help the pupils to develop new skills, the teacher must start with activities or work that the learners are able to do by themselves without helping them move to complex work that needs more help. In this way, instruction stimulates capacities that are still in an embryonic state and pushes development forward (Crain, 1992:218).

Socialization

Johnsen (2001) defines socialization as a mutual understanding of two or more persons towards each other to share and interchange interests; feelings; opinions; or information by using different systems of communication. Socialization in the classroom between the teacher and learners is another important component in the Vygotskian theory. This socialization happens only where there is communication, either in the verbal or non-verbal exchanges of daily life and it has an implication when it comes to pupils' involvement in classroom activities and relationships.

Language is thus, according to Vygotsky, a very important tool of thought and higher cognitive functions (Rogoff, 1990). Learners with hearing impairment especially those that range from severe to profound use sign language. Unfortunately, in most inclusive classrooms, fellow learners without hearing impairment do not know sign language and even most teachers. However, in the absence of sign language, the problem lies with teachers more than amongst learners because the learners still develop some gestures that they use to communicate and they are able to chat and understand one another easily. Dialogue is very crucial in the learning of children with hearing impairment because it is almost impossible to discuss the content between teachers and learners without dialogue. Dialogue helps learners with hearing impairment to feel understood as well as part and parcel of the class where their views are heard and are allowed full participation. This dialogue will allow them to easily get help from hearing learners where they have problems to understand some concepts through spoken language.

2.4 Conceptual Framework

Inclusive Education (IE) is said to be an ongoing process aimed at offering quality education for all while respecting diversity and individual differences as well as the diverse learning needs of

learners with additional support. The teaching and learning of learners with hearing impairment is much more complex than it is set out to be, as each HI learner has different learning needs. The figure below provides a detailed conceptual framework that enabled the researcher to utilise the main concepts of the research study to map out how the research was conducted:

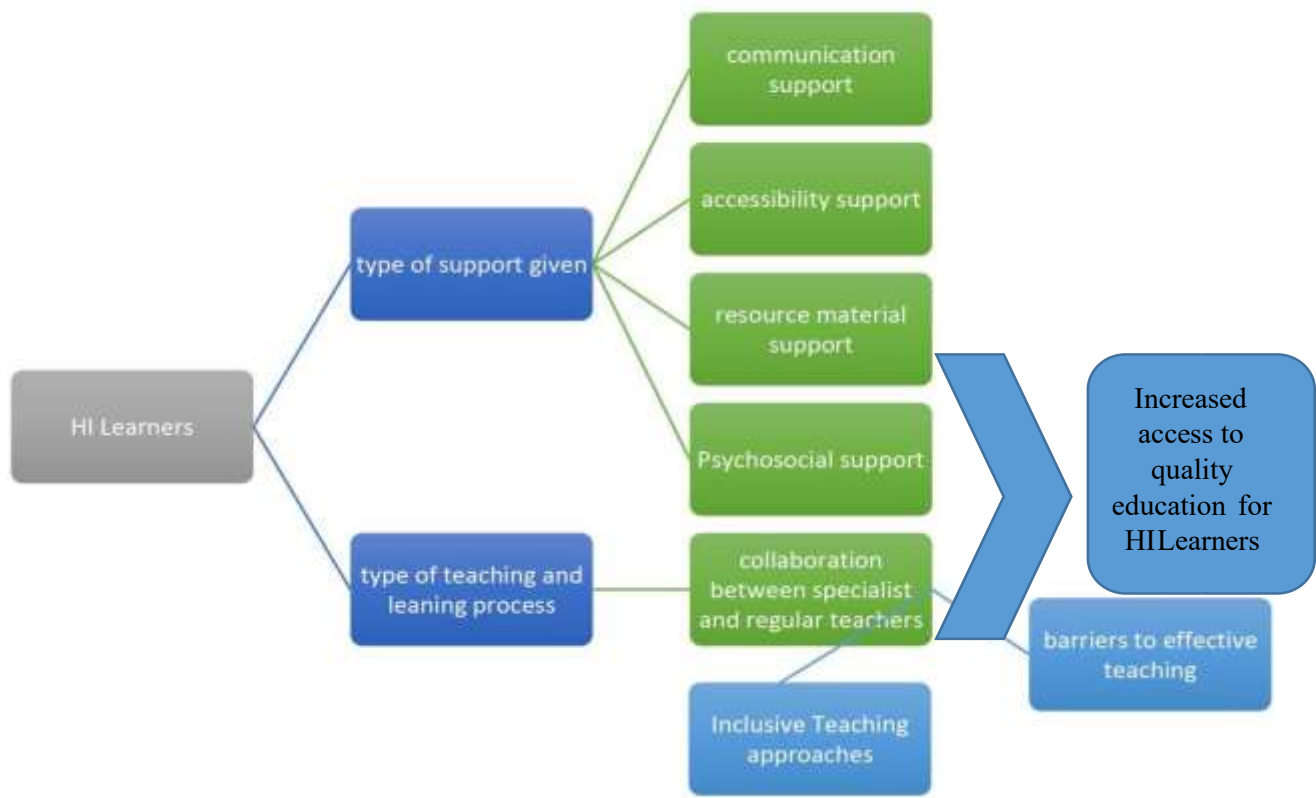


Figure 2 Conceptual framework

2.5 A Review of Global Literature on the Teaching and Learning Process of Learners with Hearing Impairment

Teaching and learning process in the education of HI learners has been a long-standing debate among scholars. The influence of the West, specifically the United Kingdom and the United States of America, has dominated the education of HI individuals and as such this study reviewed

literature from these dominions to determine the extent to which support given to learners with HI during teaching and learning process in mainstream classes can advance the academic outcomes of learners with hearing impairment.

2.5.1 Teaching and Learning Process Defined

For a normal class, the main activities in the classroom are teaching and learning. Bloom (1976) considers learning as an interaction between the learner and the learning content in a particular environment which can be measured through cognitive and affective outcomes. This statement is in line with Omari (2006), who defines learning as a permanent change of behaviour resulting from experience and reflection. This includes thinking, feeling and attitude. On the one hand, school learning largely occurs together with teaching, which means that students are engaged in learning while teachers teach. On the other hand, teaching is a process of putting across the subject content to a group of children, considering their unique learning characteristics in a specific learning situation (Mbunda, 2006; Wilson & Peterson, 2006). The teaching method can be decided according to the direction of communication between the teacher and the learners or the learners themselves. Thus, the role of the teacher in the learning process is crucial, especially for learners with hearing impairment who need special attention.

2.5.2 The Role of the Teacher in Educating Learners with Additional Support Needs

Teachers are key elements in guiding teaching and learning practices in school (Ainscow et al., 2013; Marin, 2014). Inclusive classrooms include children with diverse needs. Teachers are responsible for planning the teaching and learning strategies that meet the diverse needs of the individual child. Promotion of inclusion in the classroom depends on the intention and knowledge of the teacher. Teachers are required to be innovative in developing teaching and learning tasks for all children.

Moreover, Agbenyenga and Klibthong (2015); Agbenyenga (2007); and Florian (2008) emphasise that teachers should be creative in developing an inclusive environment in the classroom and resources that enhance inclusion.

Teachers may create an inclusive environment in which all children are valued and respected in inclusive schools (SCERT, 2010). Every child should have the opportunity to enjoy the sense of belonging to a school community (Chapman, 2006). Teachers should promote effective interactions that foster social interactions between all children. Positive interactions promote a positive social and emotional development of the children, specifically CWD.

Well-organised inclusive schools motivate high-level interaction and foster development of friendship among children in school, which is a very important aspect in early childhood development (Antia et al., 1994; Buysse, 1993; Finkel et al., 2009; Guralnick et al., 2007; Theodoru & Nind, 2010). Moreover, Antia et al. (2011) suggest that the time spent in inclusive settings determines the degree of social interaction. Teachers are a very important component of inclusive education; they are responsible for providing instruction in the classroom that benefits CWD (Bhatnagar & Das, 2014b).

Teachers are key facilitators of inclusive education. The success or failure of CWD depends largely on teachers as they are responsible for teaching and learning processes by creating learning opportunities for all children within their classroom. Children with hearing impairment have learning needs that must be considered at all times, particularly in the planning, presentation, and evaluation of the lessons, if desired learning outcomes are to be achieved.

For instance, learners with hearing impairment need concrete teaching methods; some need to touch, taste and feel things to learn about them (UNESCO, 2001). Consequently, the use of pictures, film, photos, drawings, can stimulate the children's knowledge and experience through stimulating

their imagination. Generally, the learning needs of learners with hearing impairment depend on the severity of the disability. This means learners with hearing impairment have different needs to be considered during classroom instruction. All children can learn at a level according to their learning needs and also to their pattern of development. This recognition of difference points to the fact that learning does not follow the same route for every individual child.

2.5.3 The Role of Peers in Supporting the Teaching and Learning of HI Learners.

Inclusive schools promote respectful and supportive relationships, prevent the bullying epidemic, and build the attributes of positive peer-to-peer interactions. Due to the current state of our national economy and shrinking education budgets, schools and businesses alike are striving for both efficient and effective ways to maximise resources. One very powerful resource that is often overlooked, underutilised and perhaps not well understood is right in front of us: peer support. Let us explore this “natural resource” because it is not only a fiscally responsible strategy, but there are also ethical, moral and human lessons that can be “capitalised”, some of which will not be measured on a standardised assessment, but are absolutely necessary to preserving our democratic society and principles.

According to Kamchedzera et al. (2017), peer support is a strategy that involves placing students in pairs or in small groups to participate in learning activities that support academic instruction and social skills. This instructional approach does not require additional staff or extra funding. It is a research-based methodology that yields positive results related to student achievement and a sense of “belonging” over time. Peer support provides teachers with a learning tool to enhance instruction for students with and without disabilities.

The following are three innovative ways that peer support can be used to meet the instructional and social needs of students with hearing impairment in the general education setting. However, each of these models requires upfront planning that includes selecting the right strategy, utilising it at the right time with perhaps individualised outcomes, all aligned with the lesson goals (Vygotsky, 1978):

- Collaborative Learning—An instructional strategy used to reinforce skills taught by the teacher. This teaching method allows time for practice, review, and opportunities for students to use higher-level thinking skills.
- Cross-Age Peer Support is another strategy that assists with the learning in the general education setting. This approach typically involves older students, usually high school age, who provide instructional support for elementary or secondary students.
- Peer Modeling is another support that can be used to help learners learn academic processes and classroom routines. It also provides the classroom teacher with opportunities to use peers to assist with instruction, clarifying directions and give social reminders with little or no disruption to the lesson cycle. It is an excellent way for peers to provide appropriate behavioral models of students who need to improve their social skills.

2.6 Types of Support Given to HI Learners in Mainstream Schools

Studies have shown that support given to HI learners varies from country to country and largely depends upon the policy governing IE, availability of resources and extent of hearing loss. In this section, we review the literature on various support sources provided to HI learners.

2.6.1 Assistive Devices

Studies conducted in England mainstream schools revealed that majority of support provided to learners with hearing impairment include the use of assistive devices such as Cochlear Implants, Hearing Aids and Frequency Modulation radios. Hearing aids are external assistive devices commonly given to learners with profound to mild hearing loss to assist with sound reception. Cochlear implants are internal devices that involve directly connecting a hearing aid to the auditory nerves in the brain and is often used by those born completely deaf. In England cochlear implants are more common than hearing aid among HI learners. However, these are costly and require periodic monitoring as they are directly linked to the brain and may cause swelling, if not monitored. Frequency modulation is a sound amplifier connected to radios that learners carry during classroom to help them with hearing and these are also common in most western schools including England (Marschark et al., 2007).

In Malawi, majority of HI learners use hearing aids and very few use cochlear implants. These hearing aids are often provided free of charge by Montfort Special Needs under the Roman Catholic Church directorate in Chiradzulu district, southern region of Malawi. In the central region, they are available at the African Bible Clinic (ABC) in Lilongwe. Additional hearing aids are also provided at Queen Elizabeth Central Hospital in Blantyre and can often be provided to other districts through community outreach clinics with support from Sound Seekers and Starkey, international based organization's committed to supporting access to information for HI people through provision of hearing aids. Hearing aids in Malawi are less costly than cochlear implants which require specialized clinics and high-end equipment. These devices are said to help with learning and socialization of learners in classroom. However, there is little evidence to suggest that there is direct correlation between assistive devices and academic outcomes of HI learners.

2.6.2 Sign Language

By means of Sign Language, the deaf pupil obtains knowledge about the world in the form of signs, which are then paired to words that serve to describe the perceptions they make about the world around them (Henning & Salander, 2004). Studies across the world have highlighted the impact of sign language and sign bilingualism as an interactive method that plays a critical role on hearing impaired children's academic development. A German study on the influence of sign language and bilingual education on hearing impaired children's writing skills (Gunther & Schafke, 2004), drew attention to the need to maintain a strong correlation between sign language and text book language to ensure that hearing impaired students have full understanding of the learning objectives they are supposed to achieve.

2.7 How Specialist Teachers Complement Regular Teachers in the Education of HI Learners

As explained above, specialist teachers and regular teachers play a significant role in the education of HI learners. Specialist teachers are teachers who obtain professional qualifications in the discipline of inclusive education with focus on specific type of disability or multidiscipline approach. While regular teachers are those with teacher qualifications only for teaching learners without additional support needs. Inclusive Education is an approach to integrating learners with additional support needs and disabilities in an education system with learners without disabilities. There are two different approaches that are commonly used for integrating learners with disabilities and these include use of resource rooms where learners get supplementary lessons or using assistive support in main classes.

Nevertheless, both of these approaches to including learners with additional support needs require collaboration between regular and specialist teachers and the same can be said for including HI learners. There are two distinct categories of specialist teachers who support the education of HI

learners, and these teachers include “Teachers of the Deaf” (TOD) who are qualified Deaf teachers who act as assistant teachers in the classroom. The other category includes specialist teachers who are not Deaf but are qualified in the education of Deaf and hard of hearing learners. Normally, TODs work with learners in main classrooms, while specialist teachers are often limited to resource rooms. This is a common trend across the globe including Malawi.

The teaching and learning of HI learners depend on the extent of hearing loss because others have the ability to hear using hearing aids and cochlear implants, while others depend on sign language. Teachers normally gauge the level of hearing before assigning a learner to a resource room or main class. In other cases, the HI may learn from both resource and main classroom depending on the difficulty of the subject in the main class. Thus, in instances like these, specialist teachers and regular teachers need to work in sync to ensure that they are on the same page regarding the education of HI learners.

Studies on the collaboration between specialist teachers and regular teachers in the education of HI learners tend to lean on the positive side. A study conducted in Glasgow, United Kingdom in 2015 revealed that majority of regular teachers expressed misgivings regarding the inclusion of hearing-impaired students in the mainstream classroom due to their lack of expertise in dealing with such children and expressed the need to include specialist teachers in the classroom. The class teachers also cited communication barriers as a key factor, more especially where signing and lip reading were involved. The teachers found themselves constantly repeating words and this meant most of the lessons were left incomplete. What prompted them to maintain a negative attitude towards the inclusion of the deaf child, however, was the disruptive behaviors exhibited by some of the hearing-impaired children such as responding rudely to questions and in most cases, ignoring the teacher when being addressed, leaving the classroom without asking for permission, handing

in incomplete and often poorly written work (Vermeulen et al., 2011). As such, collaborative working is beneficial in increasing support for learners with hearing impairment.

2.8 Participation, Experiences, Challenges and Opportunities for Learners in Mainstream Schools

The mainstream classroom is a place where HI learners experience a wide range of positive and negative factors that have a direct impact on their ability to engage in classroom discourse. It is against this view that this study seeks to examine the nature of these experiences, challenges and identify opportunities that can enhance the learning experience of HI learners in the mainstream classroom.

2.8.1 Participation and Experiences of HI Learners in Mainstream Schools

It is common knowledge that HI learners who benefit from education in special schools have different experiences to those who learn in mainstream classes. Studies on learners' experiences and perceptions of learning highlight the significance of HI learners' experiences and perceptions in mainstream classrooms to find appropriate methods of ensuring that the learners are learning and participating effectively in the classroom. For example, O'Neill and Marschark (2013) found that 20 out of 32 local authorities in Scotland do not provide a secondary resource base for hearing impaired children and as such, hearing impaired children have no choice but to attend their local mainstream school. This could put the hearing-impaired child in a disadvantaged position where they attend a school that does not provide for their academic well being.

When Lantaffi et al. (2003) carried out research on hearing impaired students' views and experiences on their inclusion in mainstream schools, they found that a majority of the such students preferred to be taught separately from the mainstream class. The students claimed that

they preferred working with teachers of the hearing impaired rather than mainstream teachers, because the teachers gave them their full attention and assisted them with their homework, exams and classwork, though a few of the students complained that teachers of the hearing impaired can be quite intrusive, always telling them what to do rather than allowing them to think for themselves. They were also thought to interfere with their friendships with other students. Only a handful expressed satisfaction working with their mainstream class teachers, who were often skilled with working with children with additional support needs. This means that the level of expertise and attention given to HI learners in mainstream classrooms has a significant impact on learner's ability to learn effectively in the classroom.

2.8.2 Barriers to Inclusive Education for Learners with Additional Support Needs

While there is evidence of positive effects of inclusive education on learners with disabilities, there are serious challenges that such learners face in attaining quality basic education in government primary schools. It is a tough experience for these learners to attain quality basic education in an inclusive setting, as compared to what learners without disabilities experience (Luetke-Stahlman, & Luckner, 1991).

Learners with hearing impairment face a lot of challenges that hinder them from full and effective participation in inclusive education on an equal basis with learners without disabilities. It is this kind of scenario that tends to put off other children with disabilities from accessing and attending primary education, and those who are already in school repeat the same classes for several years before they eventually sadly drop out.

On the part of governments, most of them may have signed and ratified the international human rights treaties that advocate the education of children with disabilities. They may even seem

committed to implementing inclusive education. However, there is very little that they are doing to achieve satisfactory inclusive education and universal primary education as required by SDG. This is so because there are several barriers that governments face in implementing inclusive education.

In general, literature has revealed a lot of reasons for the low attendance of primary education by learners with hearing impairment. Conventional schools are few and sparsely populated, presenting long distances for learners to cover from homes to the schools. Sign language, which is the primary language of most HI learners, is not known by teachers and peers, making it difficult for the learners to communicate amongst themselves and teachers. HakiElimu (2008) is of the view that the majority of conventional schools do not have personnel trained in handling children with disabilities. There is an acute shortage of specialist teachers and assistive devices for learners with hearing impairment in most conventional schools in Malawi and also no knowledge of sign language across the education system. The Government seems to have done very little about this problem. There is also lack of implementation of policies, like the Disability Policy, by the Malawi Government.

2.8.3 Benefits and Opportunities for Learning in Mainstream Classrooms

Inclusion provides benefits to learners with hearing impairment such as access to education in their communities, learning opportunities, social benefit of interaction, access to academic opportunities, and opportunity to establish friendships. Inclusive education does not only benefit learners with hearing impairment, but also benefits hearing learners and teachers. These benefits are discussed below.

2.8.3.1 Access to education in their communities

The possible benefit noted by Berndsen and Luckener (2010, p.2) is that “learners with hearing impairment will be able to live at home with their families instead of needing to attend a special school and having to live at the school throughout”. Kaupinnen (1994) as cited in Adoyo (2007), discovered that inclusive education allows learners with hearing impairment to feel accepted as normal members of the society as they attend school in their community.

2.8.3.2 Social benefits

According to McMillan (2008), when learners with hearing impairment become part of an inclusive education classroom, they are more likely to become socially accepted by their peers. The more learners with hearing impairment have contact with their hearing peers, the greater the chance they will learn tolerance and have a greater acceptance of others’ differences. Antia et al (2009) share the similar sentiments by indicating that the inclusion of learners with hearing loss in inclusive schools promotes their social interaction with the hearing world. They also have behavioral models provided by their peers and a stimulating oral environment.

2.8.3.2 Learners with hearing impairment develop self-confidence

According to AlShahrani’s (2014) study, being in inclusive school helps learners with hearing impairment to gain more self-confidence when they are among hearing learners who also allow them to become more independent and not too dependent on the teachers. This finding is in line with that of Gupta (2014), who indicated that higher expectations ultimately lead learners with hearing impairment to achieve more, gain confidence and independence, and develop a stronger sense of self.

2.8.3.4 Access to academic achievement

Kiriungi et al. (2014) conducted a study that investigated the assessment of public primary school teachers' attitude towards inclusion of learners with hearing impairment. Their findings revealed that if learners with hearing impairment are taught together with learners without impairment, they are likely going to perform better. The findings further stated that interactions with hearing learners would help learners with hearing impairment improve their academic performance and, in the end, they may develop confidence in their own academic ability.

Ibrahim (2013) asserts that learners with hearing impairment who have been included in inclusive classrooms have shown stronger academic results when compared to those who have been educated in separate classrooms. This increased performance could be attributed to interaction with higher achieving hearing learners and the enjoyment of working with peers and being included in a normal setting. Furthermore, Bashier (2005) states that inclusion also helps learners with hearing impairment to master new skills and it encourages them to strive for great achievement.

2.8.3.5 Benefits of inclusion for students without disabilities

Learners without disabilities also benefit a lot in an inclusive setting. These benefits include meaningful friendships with the peers with hearing impairment, which brings about increased appreciation and acceptance of individual differences. Additionally, it helps hearing learners understand and accept diversity, and respect for all people, while preparing all students for adult life in an inclusive society where people with hearing impairment are part and parcel of. Furthermore, it provides them with the opportunity to master activities by practising and teaching others as they engage in helping learners with hearing impairment where necessary, and that may bring greater academic outcomes.

2.9 Summary

In summary, this chapter has provided an overview of the literature on the support given to HI learners in mainstream classroom. It has also provided an insight on the studies conducted across the globe on challenges and barriers that prevent HI from accessing adequate learning in the mainstream classroom and the available opportunities for them to enhance their participation in schools. The socio-cultural theory formed the basis of the theoretical framework upon which the study was carried out.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents a detailed account of the research approach and design, study area and target population. It also includes samples and sampling techniques in which sample and selection of sample schools and children are clearly described. Additionally, this chapter explains the tools employed in data collection, administration of tools and data analysis procedures. It also describes issues governing validity and reliability as well as ethical considerations.

3.2 Research Philosophy

People are known to construct their own meanings in different ways regardless of continuous exposure to the same phenomenon, and it is for this reason that there are often multiple opposing but valid perspectives regarding the nature of the phenomenon that is being experienced by the individuals (Gray, 2014). Ye Wang (2010) asserts that HI individuals construct reality in a different way from hearing individuals and therefore, their understanding of what constitutes effective teaching is far more different from that of hearing individuals. In following a constructivist epistemology, the study seeks to assess the support given to learners with hearing disabilities in the process of teaching and learning in mainstream classrooms.

3.3 Research Design

The research design is the overall method and strategy of the research work (Coolican, 2004). It is a plan that guides the researcher on how to conduct research; it enables the researcher to convert the study topic into projects that can be investigated (Hayes, 2001) and provides specific direction for the research procedures (Creswell, 2014). Punch (2014) suggested four basic components of the research design including the research questions, conceptual framework, data collection tools

and analysis. Selection of research design depends on the nature of the study and information required. In education, as in other social science research, there are three types of research design: quantitative, qualitative and mixed methods design.

The study employed the qualitative approach. It is not easy to define qualitative research clearly because it does not have its own theory and methods of data collection (Denzin & Lincoln, 2011; Ritchie et al., 2013). However, scholars describe qualitative research as a naturalistic, interpretive approach that focuses on the exploration of phenomena from within and considers the researcher's perspectives as a starting point (Ritchie et al., 2013; Flick, 2015). Specifically, the qualitative research unique description found in various qualitative literatures include interpretive practices that transform and make the world visible through representation materials like interviews, field notes, conversations, memos, videos and audio records, and photographs. More important is its ability to allow the researcher to investigate natural settings aiming to derive sense and interpret events and experiences according to meanings attached to them by the research participants (Cohen et al., 2001; Creswell, 2014; Denzin & Lincoln, 2011; Litchman, 2013).

Qualitative research seeks to answer the what, why and how questions. It is flexible in nature and focuses on processes in the field of study. Silverman (2011) adds that in qualitative research, hypotheses are usually the product of data analysis rather than study guidance. Ritchie (2013) suggested the common characteristics of qualitative research to be:

- the aims and objectives that are directed at providing an in-depth and interpreted understanding of the social world of the participants by learning about the sense they make of their social and material circumstances, their experiences, perspectives and histories;

- the use of non-standardised, adaptable methods of data generation that are sensitive to the social context of the study and can be adapted for each participant or case to allow the exploration of emergent issues;
- data that are detailed, rich and complex;
- analysis that retains complexity and nuance and respects the uniqueness of each participant or case as well as recurrent, cross-cutting themes, openness to emergent categories and theories at the analysis and interpretation stage;
- output that includes detailed descriptions of the phenomena being researched, grounded in the perspectives and accounts of participants;
- a reflexive approach, where the role and perspective of the researcher in the research process is acknowledged. For some researchers, reflexivity also means reporting their personal experiences of the field.

3.4 Area of Study

The study was conducted in three primary schools in Mzimba. These schools are purposefully selected. Kothari (2004) argues that purposive sampling is a deliberate selection of particular units of the universe that can provide the information required. Thus, the schools were selected because of the likelihood that there would be learners with hearing impairment and of different degrees as well as specialist teachers who are specialised in the area of hearing impairment.

In addition, school A is an urban school, while schools B and C are located in rural areas. School C is a special school located in Embangweni, Mzimba, which was selected as an intervening variable to compare and contrast the support given to learners during teaching and learning process between mainstream class and special school. This was a purposive selection because urban and rural schools may differ in terms of resources as well as physical environment, which may in the

end affect the support that is given to the learners. The researcher would appreciate the difference and draw some conclusions on the same.

3.5 Sampling Methods and Sample Size

The sample for the study was selected using Purposeful Sampling method because of the presence of criteria that were in line with the objective of the research (Silverman 2013; Burns, 2000); which was to assess the support provided to learners with hearing impairment during teaching and learning process in mainstream classrooms. Therefore, the researcher drew a purposeful sample from the mainstream schools in Mzimba district. The table below provides a summary outline of the total sample size representation. A total of 59 participants participated in this study.

Table 1 Sample framework

School	Specialist teachers	Regular Teachers (including HT)	Learners with hearing impairment	Learners without hearing impairment	PEAs
School A	4	10	6	10	1
School B	1	10	6	10	1
School C	8	2	150	None	1

3.6 Data Collection Methods

Data was obtained with the use of various methods to ensure reliability (Martella et al., 2013) and quality (Yin, 2016) of this study. The use of different techniques in collecting information is useful for gathering more information and it helps in cross-checking the authenticity of the information collected (Yin, 2016). Furthermore, different techniques help in triangulation of the information (Cohen et al., 2001, 2011; Yin, 2016). Denscombe (1998) suggests that the use of different techniques helps to substantiate the authenticity of the data collected, as well as exhaust the

possibilities of the validity and reliability of the study. In this study, three common methods in social research were employed. These include interviews, Focus Group Discussions (FDGs) and observation methods.

3.6.1 Interview Method

This study used interviews as one of the major methods of obtaining relevant data on the support given to HI learners during the teaching and learning process. Interviews are a widely used method of collecting qualitative data. It is a purposeful interaction in which the researcher tries to acquire information from study respondents (Angrosino, 2007; Cohen, 2001; Gay et al., 2006). Semi-structured interviews were employed to obtain information from specialist and regular teachers. This tool was purposefully selected due to its strength in collecting qualitative data in case studies (Yin, 2016). Firstly, it is recommended to be the best tool of data collection suited to a qualitative study as, compared to structured and unstructured interviews, both are focused and time effective (Patton, 2002). Structured interviews are rigid in format and procedure, thus possibly ignoring the right of respondents to give their opinions or views. Unstructured interviews are more flexible but not focused. And as such, it is difficult to obtain targeted information.

Secondly, the interviewing technique was used in this study to enable the researcher discuss with the respondents the interpretation of inclusion and mainstreaming in Malawian context. Interviews were used because they encourage the respondents to give their own opinion and views (Yin, 2016) concerning the inclusion in general and support in particular, given to learners with hearing impairment in an inclusive setting. It also enabled the researcher to use multisensory channels to capture verbal, nonverbal, spoken and heard information. During the interview sessions, the

researcher was able to control the order of the interview and to interrogate and seek more information for more critical issues in the teaching and learning of HI learners (Cohen et al., 2011).

3.6.2 Observation Method

Observation, as a central method of data collection in a qualitative study, was also used in this study of evaluating the classroom support for learners with HI. Observation method allows the researcher to use all senses to understand the situation under investigation. The research observation as a scientific method involves the systematic process of recording the individuals' behaviour as they are viewed. Observation in this study was used to gather primary qualitative data (Angrosino, 2007; Mukherji & Albon, 2015; Ritchie et al., 2013) directly from a natural social setting (Cohen et al., 2011; DeWalt & DeWalt, 2011; Fetterman, 2009; Marshall & Rossman, 1995; Taylor et al., 2015; Yin, 2016). This allows the researcher to observe directly from the social situation and see what is taking place instead of relying on second hand information (Cohen et al., 2011). The researcher can then access unexpected information (Martella et al., 2013), as what people say they do may differ from what they actually do (Robson, 2002). The observation method provides the researcher with an opportunity to observe behaviour that cannot be captured by other methods.

Bearing in mind that observation is a strong research method that gives the researcher more valid and reliable data, the researcher organised different observation sessions during the process of teaching and learning in the classroom to capture learning experiences. Inside the classroom, the researcher observed methodologies employed, the teaching and learning materials used, the support provided to the individual learners with hearing impairment, the interaction amongst teacher, learners with hearing impairment and learners without hearing impairment. The researcher

also observed the frequency that learners with hearing impairment were involved and participated in learning activities.

These observations took place in all the sections of the schools namely; infant, junior and senior sections of the school, targeting classes that have more learners with hearing impairment. The researcher also made sure that both specialist teachers and regular teachers are observed to establish how different or similar they support learners with HI in how they deliver their lessons.

3.6.3 Focus Group Discussions (FGD)

A focus group discussion involves gathering people from similar backgrounds or experiences together to discuss a specific topic of interest (Asbury, 1995). It is a form of qualitative research where questions are asked about their perceptions, attitudes, beliefs or opinion and ideas. In this study, FDGs were used with learners both with and without hearing impairment. A Focus Group Discussion (FGD) is a qualitative data collection technique that has been widely used in research across disciplines. In development and humanitarian work, they are often one of the main data collection techniques for needs assessments, situation analysis, and Monitoring and Evaluation. Bernard (2013) asserts that focus groups are essential for discussing how people feel about a particular phenomenon, activity or behaviour. Through collaboration and interaction between the participants, the researcher was able to obtain broader perceptions and in-depth data on the support given to HI learners during the process of teaching and learning in mainstream schools.

Using Focus Group Discussions can enable researchers to:

- Explore in depth people's experiences, points of view and perspectives - in other words their personal experiences;

- Identify shared norms, common knowledge, shared beliefs and divergences of points of view;
- Gain concrete facts about a situation from a group of key informants who have rich knowledge about a topic. This can be something as ‘simple’ as what life is like for them, or their opinions on how services are provided.

In a sense, FGDs encompass semi-structured discussions organised in a formal and structured manner. The FGD was used to collect data based on each objective of the study laid out in Chapter One. They are said to be a data collection technique that combines interview and observation. FGDs are a way to bring together a small number of participants with knowledge of or concerned by the issue who interact with each other in an in-depth discussion. They are often managed by a facilitator and an observer using an interview guide that lays out the interview initiation procedure (initial guidance/warm-up questions/activities) and themes to cover. Most significantly, FGDs are a way to obtain multiple opinions. The interactions create the substance. People are allowed to agree or disagree with each other. The objective of a FGD is not to seek consensus but to explore as many different opinions as they exist and generate the most reliably rich data from the interaction (Gray, 2014).

In each school, sixteen learners participated in the FDGs. Ten without HI, which included 5 girls and 10 boys; 6 with hearing impairment, which included 3 girls and 3 boys.

The researcher felt that FDGs would work better with learners both with hearing impairment and those without additional support needs. Bearing in mind that learners with hearing impairment often have language and speech difficulties and that some learners are adept at sign language, while others use speech/lip reading and more challenging others do not know how to communicate, the researcher used communication supporters and sign language interpreters to foster communication during the FDGs.

3.7 Data Analysis

Data analysis, according to Mwituria (2012), is the process of looking at and summarising data with the intent to extract useful information and develop conclusions. The data was analysed according to the objectives of the study. Qualitative data was analysed using NVIVO software, which allows for qualitative inquiry beyond coding, sorting and retrieval of data.

In addition, the study used Thematic and Content Data Analysis tools as part of the descriptive data analysis of the qualitative data. Qualitative content analysis specifically assists in understanding of social reality or phenomenon by interpreting reality of verbal or written recorded communication materials. The researcher is able to process large quantities of data and is flexible in that the data can be verbal or visual and sampled from other sources as well as collected by the researcher from a natural setting (Shava et al., 2021). Qualitative content analysis was applied because of its capacity to take into account the context in which the material was generated and at the same time it considers the theoretical background of the research (Mayring, 2007). In addition, coding the material by using a structured thematic category system makes it possible to reconstruct the steps of analysis. This strengthens the reliability of the analysis and the comparability of the results.

3.8 Validity and Reliability of Study

Validity is said to be concerned with the accuracy of data analysis, appropriate data techniques or measures, as well as generalization of findings. Validity means the extent to which conclusions drawn from research provide an accurate description of what happened or a correct explanation of what happens and why, while reliability means the extent to which a measuring instrument gives consistent results. An instrument is valid when it measures what it claims to measure. Hence, validity refers to the extent to which an instrument measures what it purports to measure.

To ensure the external and internal validity of this study, the researcher sought to obtain results directly from the variables that were researched, that is, the participants' perceptions and experiences (Gray, 2014).

Content validity of the instruments was considered in developing initial drafts and the final instruments before the researcher embarked on the fieldwork. Content validity of the data collection instrument refers to the extent to which a measurement instrument is a representative sample of the content area (domain) being measured (Leedy & Ormrod, 2001). The interview questions were written in English and then translated into Chewa and Tumbuka languages, which are most spoken in these three schools. The translation was necessary to increase the content validity. The Chichewa translation was done by the researcher, but the Chitumbuka one was done by a colleague who possesses the knowledge and skills required in the translation process of English to Tumbuka.

Reliability refers to the extent to which your data collection techniques or analysis procedures will yield consistent findings. The researcher ensured that measures are taken to reduce participant bias, such as where interviewees may want to align responses based on what they think you want to hear, and also reduce observer error by using recording device. Reliability assesses the level of consistency in a measuring instrument as Gray (2014) further explains, reliability is a technique used to check if a research instrument can produce similar results when used more than once. It has to be said that, it is possible to replicate the same study later in the years and come up with different results. Thus, to ensure that the study is more reliable and can be replicated at any time, the study ensured that the sample size was large enough to enhance generalisation and that the sample was drawn across different locations.

3.9 Pilot Study

A pilot study is said to be a means of assessing the effectiveness of the data collection tools that researchers intend to use for their studies. A Pilot study is very important as it enables the researcher to identify gaps in the research methods and develop a viable research method that will enhance the validity of the study (Arain et al., 2010). In this view, the researcher conducted a pilot study at a primary school within Mzimba, but was not part of the main study.

3.10 Ethical Considerations

To ensure that the study abides by the ethical rules and regulations set out by Mzuzu University, the study ensured the following ethical considerations.

3.10.1 Ethics Approval

The study was conducted to obtain academic MSc qualifications under the guidelines of Mzuzu University. The researcher applied for Ethical Approval from Mzuzu University Research Ethics Committee (MZUNIREC). In addition, the researcher obtained a consent letter from the District Education Manager of Mzuzu and Mzimba as well as the Northern Region Education Division, to conduct the study in the Northern Region Education Division.

3.10.2 Informed Consent

The researcher made sure that this study abides by ethical research principles, specifically the ethical principles when working with learners, human rights as well as national policies. Research ethics involves the research process from planning, conducting, communicating and following up research (Punch, 2014). In the research process, each stage embraces some ethical issues (Cohen et al., 2011). Equally important, Flick (2015) emphasises that the goal of research ethics is to guarantee transparency and remove any dishonesty for participants, also the handling and

protection of data. Basic ethical issues governing social science research focus on obtaining the research permit, informed consent, confidentiality, privacy, anonymity, and risk of harm (Bell, 1991; Cohen et al., 2011; Hammersley & Trainaou, 2012; Hatch, 1995; Krishnaswami & Ranganatham, 2006; Kumar, 1999; Punch, 2014). The research process in the field was guided by rules and regulations, which the researcher paid careful attention to.

The researcher obtained a research clearance letter from the University to go to the Northern Region Education Division to obtain a letter of approval to access schools.

The purpose of the study was briefly and described to all the participants. Objectives and benefits the school would reap from the study were also explained so that they understand the study and in return willingly participate in the study without being compelled in any way. (Cohen et al., 2018; Krishnaswami & Ranganatham, 2006).

Participant informed consent was obtained from participants. Informed consent is the agreement of the respondent to participate in the study freely, by their choice and comfort (Berg, 2006). Diener and Crandall cited in Cohen et al. (2001), defined informed consent as “the procedures in which individuals choose whether to participate in an investigation after being informed of facts that would be likely to influence their decision. It is the process that involves the respondent’s decision to participate or not to participate in the study” (Cohen et al., 2001, p.51). The researcher sought to obtain participants’ informed consent by directly approaching parents and the learners with assurance consent forms that were given to participants; together with the right to opt out of the research or sue the researcher for breach of contract. In addition, the researcher obtained criminal clearance from the Malawi Police Service as a means of ensuring child safeguarding.

The confidentiality issue is also extremely important in a study. Respondents were assured that the information provided would be handled with confidentiality. In this study, the confidentiality was absolutely crucial, as learners with disabilities can be very sensitive. Confidentiality involves protection of participant anonymity and privacy. To ensure participant anonymity, codes were used instead of names.

3.10.3 Data Management

To safeguard the research data collected, the researcher made sure that all data storage devices used in the study such as external hard drives and flash drives were password protected. Although the researcher also took to online OneDrive storage devices, this was used to the bare minimum for fear of cyber hacking. Moreover, online storage devices require immediate access to the internet and this can be a problem if there is no readily available internet connection.

3.11 Limitations of the Study

The study focused on the support that learners with HI receive in government primary schools. Therefore, the findings, conclusion and recommendations presented in the study do not reflect the situation in the private primary schools or other settings that provide special needs education.

In addition, generalisation of the study addresses was greatly affected due to the low presence of HI learners in mainstream primary schools in Mzuzu City. This challenge was further intensified by the presence of large number of HI learners accessing special schools in Mzimba and Nkhatabay districts, which surround Mzuzu City. Considering that inclusive education is a broad term, the study was confined to learners with HI in regular schools only; covering three primary schools. In these schools, the study only concentrated on learners with HI in an inclusive setting. Additionally, the study was confined to the process of teaching and learning. Therefore, the findings cannot be generalised to all learners or all schools in Malawi.

3.12 Chapter Summary

In summary, this chapter has provided an outline of how the study was conducted based on the research design laid out and the data collection methods utilised. The study also ensured adherence to ethical considerations to meet the required standards of academic research. The study acknowledges that it may not be able to generalise the results of the findings. However, the researcher believes the study can be used to inform policy on effective support mechanisms for enhancing the education of HI learners.

CHAPTER FOUR: FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the data that was collected from two primary schools in Mzimba and discuss what that data means to this study. In the first place, there is a presentation of the demographics of the data.

4.2 Participants' Demographic Data

Data was collected at a rural primary school and an urban primary school in Mzimba. These are two public primary mainstream schools that enrolled hearing impaired students and also have resource centers for hearing impaired students to get more assistance outside the classroom and normal operating hours. Data was collected from headmasters, teachers, students and advisors. The researcher used an interview guide in collecting data from all the above participants. There was also an observation of the lessons in session, one from each school which complemented the interviews that were conducted.

The table below presents the demographic data of participants

Table 2 Gender presentation of HI learners

GENDER	Specialist teachers	Regular teachers (including HT)	PEA	Learners with hearing impairment	Learners without hearing impairment	Total	%
Male	0	9	2	8	12	31	53%
Female	4	11	0	4	8	27	47%

Only 12 learners with hearing impairment were identified in the mainstream schools, representing 20% of the population sample. It was observed that there are more male hearingimpaired students than female students (8 out of 12), representing 26 % of the total population sample. The few

hearing-impaired students that are enrolled suggests that many are left out without formal education. These numbers are of catastrophic levels that needs quick and sustainable intervention from multifaceted fronts. The gender disparity among the enrolled students also needs to be addressed. No female hearing-impaired girl of school age should be left behind because the repercussions are huge on the country's development goals. The research did not find out the reasons for this situation as it was outside the scope of the research, but it is safe to say that this is the situation in any formation as there are more male employees than females.

Table 3 Number of participants interviewed

Participants	Male	Female	Number
Ordinary teachers	9	11	20
Specialized teachers	0	2	2
Headteachers	2	0	2
Education advisors	2	0	2
Learners with hearing impairment	8	4	12
Learners without hearing impairment	12	8	20
Total			58

The table above also shows that there are more female specialized teachers than males (4 females, 0 males), representing 22% of the total population sample, hence the reason more female teachers were interviewed and classroom observation was done with female teachers. The research did not find out why this is the case, but there should be gender representation at all levels in schools. The current situation shows that although many teachers enroll as specialist teachers, not many pursue the career due to poor payment and benefits.

Table 4 Number of participants involved in classroom observation

<i>Participants</i>	<i>Male</i>	<i>Female</i>	<i>Number</i>
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<i>Ordinary teachers</i>	0	2	2
<i>Specialist teachers</i>	0	2	2
<i>Learners with</i>	2	1	3
<i>hearing impairment</i>	90	62	152
<i>Leaners without</i>			159
<i>hearing impairment</i>			
<i>Total</i>			

The table above presents the demographics of participants who were involved in direct observation.

At the specialist school, the researcher observed how specialist teachers teach HI learners and used the results of the observation to assess strategies that specialist teachers use in mainstream schools.

At the mainstream schools, the study found that only 6 out of the 12 learners with HI learn in mainstream classrooms while 6 HI learners spend most of their time in resource rooms.

4.3 Support Given to Learners with Hearing Impairment during Teaching and Learning in Mainstream Schools

The study found that there are several types of support given in mainstream and special schools.

The table below presents a thematic summary of the types of support given to HI learners. The data presented in the table was drawn using an NVIVO analysis.

Table 5 Type of support given to HI learners in mainstream classrooms

Type of support given	School A (Rural)	School B (Urban)	Special Needs School
Sign language communication support in classroom	No	No	Yes
Books in classroom	No	No	Yes
Sound amplifiers	No	No	No
Notes	Yes	Yes	Yes
Buddy system	Yes	Yes	Yes
Hearing aids	No	Yes	Yes

The study results show that teachers' support is very limited in classroom settings. An NVIVO analysis revealed that respondents believed sign language communication support was the most prominent of all. However, the results of findings from interview, FDGs and observations revealed that there was practically no sign language communication support for HI learners in mainstream schools, both in urban and rural areas. Sign language can be referred to as an official language for majority HI individuals across the globe. Just like any language, it is a vital component for bridging the communication gap between teachers and learners with hearing disabilities and this lack of sign language communication support from teachers in mainstream classroom means that teachers were found to help as much as they could to engage the learners with HI in the process of teaching.

Following a classroom observation of ordinary teachers, the study found that although teachers ask them questions,, just like any other learner, to make the hearing impaired learners feel part of the classroom, the teachers tended to try to raise their voice and face the learners as much as possible so that the hearing impaired learners could read lips of the teachers and grasp whatever they could, since they also speak slowly so that the hearing impaired learners can make sense of the lip reading. Teachers expressed difficulty in this teaching process because they have large classes and learners who are hard to control. Thus, they find it hard to control a large class of young learners on its own

and due to this, sometimes they forget they have hearing-impaired learners that have to be accommodated.

The other effective way that teachers were found to use was pair sharing. Hearing-impaired learners are paired with bright ones so that they get help from the best. Activities of the class like assignments were found to be taught individually, but later discussed as a pair and they wrote individually with guidance so that they got the assignment right, which eventually boosted their confidence and morale. This strategy has over time proved to be the best as hearing-impaired learners find learning exciting and always looking forward to the next class, as they feel intelligent and not left out in the activities of the class. This strategy also enhances social interaction, which is good for the academic and personal development of hearing-impaired learners and for the fact that it switches up the energy in the classroom.

4.4 How Specialist Teachers Complement Ordinary Teachers during Teaching and Learning Process

The study found that ordinary teachers try to use audible voice for the benefit of the hearingimpaired learners. This might look small but to the HI learner it is everything. Some of the learners were found not totally hearing impaired and with loud voice, they can grasp a little something. Loud slow voice helped partially impaired and hard of hearing learners to identify sounds and speech patterns through lip reading. It was also revealed that speaking slowly whilst always facing the class helps hearing impaired learners to also read the lips and be part of the class always. The only time ordinary teachers faced the black board was when they wanted to write something on the board. Facing the class helped teachers to read the room also. When learners are playing and disturbing the class, they can easily be noticed and punished to avoid repetition. Hearing impaired learners could easily be disturbed if a desk mate or neighbour was playing or

doing something destructive and ridiculing; inappropriate behaviour was discouraged, to protect the hearing-impaired learner so that they were attentive in class.

Important concepts, statements and diagrams were found to be drawn on the board. The study observed that use of visual graphics was of help to learners with hearing impairment and to all other learners. It helped in simplifying complicated subjects that could be digested easily and be remembered in the longest time unlike voice. Explaining whilst pointing at the written charts and drawings was found to make learners with HI follow the lesson easily. When the use of board writings was paired with lip reading, HI learners found it easy and enjoyed the lessons. Something similar that the ordinary teachers were found to be doing in study was the use of gestures. The study has shown that almost all the teachers of inclusion learners used ordinary gestures. Ordinary gestures help most because these teachers are not trained in sign language and that sign language is not universally agreed. Use of gestures to emphasize a point makes a HI learner aware of important concepts to never miss and have a look at later, when the class ends or when to ask questions if they do not understand the statement or concept.

It was observed that hearing impaired learners are put in the front centre role. This strategy is beneficial just like the above strategies and complements all the above strategies. Teachers are deliberate on this so that HI learners are monitored closely and any assistance is given easily and in time. Hearing impaired learners do not always raise a hand when they need assistance, but by just observing them, they are helped without requesting for assistance. Most of them are shy or afraid of raising a hand as it is seen as disturbing the lesson and fear of being seen as not intelligent. Teachers stated that without engaging the HI learners, they can go the whole term without raising a hand or actively participating in the class, which limits their academic and social development, their confidence is low, and development of curiosity is hindered.

Although it is not part of help in a classroom, but ordinary teachers stated that when preparing for the lessons, in the back of their minds they always think of the HI learner. They individualized the education plan so that they target the HI learners. Some activities are meant for the hearing-impaired learners and they try to use their strengths and uplift their weaknesses. The aim of organizing the content is not to over simplify the content as it limits the HI learner's ability to learn, but to help the such learners be at par with their peers.

4.5 The Extent of Participation of Learners with Hearing Impairment in Mainstream Classrooms during Teaching and Learning

Participants in the study expressed that there is minimal participation in the mainstream classrooms for the HI learners. The respondents reported that classes are huge, which makes participation almost impossible to everyone. This study did not find out the real reason for limited participation, but none participation might be a result of having huge classes, as this is not only for hearing-impaired learners. However, HI learners revealed that there is limited and sometimes no participation at all. It was seen that this is twofold. The HI learners themselves and the mainstream teachers were found to make less effort to participate in a classroom.

During an interview, teachers stated that they take hearing-impaired learners as equal to their counterparts and therefore cannot be given preferential treatment but as need avails itself, they are allowed to participate in anything. There is fear that if they are pushed too much, they can resent the classes and develop a dislike for school and formal education in general. Teachers elaborated that they try their best to include HI learners but there are conflicting priorities also, like finishing the class in time and making good use of the little resources available for facilitation of the classroom learning. The study understands that with these difficulties, there is a good balance between the conflicting bipolar priorities.

Most HI learners were not open enough as to why they were not willing to highly participate in the learning process. One HI learner shared that *“being hearing impaired also affects not only hearing but also speaking. Having a meaningful long conversation is a tall order and it is complicated in a classroom environment where my friends and teachers do not know sign language”*. The HI learners themselves have not even mastered sign language. They participate more at resource centres because they have no choice and among peers that understand each other. Another study participant expressed that the classroom is intimidating and not friendly to hearing-impaired learners as they feel they are not embraced yet as part of the class by peers and teachers. One HI learner reported that, *“I feel lonely most of the times and I feel like I bother my teacher and friends when I have questions or can’t hear because they already have other things to do”*. Life difficulties as they come from poor backgrounds has affected their self-esteem to the extent of not participating in class, as they lack basic resources to help them survive in life.

The HI respondents revealed that they are afraid of being laughed at when they give a wrong answer or are not able to read and are having problems in mathematical concepts. Teachers, peers and parents/guardians do not motivate them to do better in school as if they already know they are failures and because of this, they do not see the importance of school in general and the relevance of class participation in particular. Another HI learner complained that teachers mention their names but are not allowed more time to participate, which discourages them from participating in the classroom. It is seen that they are wasting time and no one is interested in hearing them as most of the class cannot comprehend what they are saying.

4.6 Experiences of Hearing Impairment Learners and Opportunities for their Development in Mainstream Schools

The study used non-participatory observation. This observation technique enabled the researcher to collect data from their natural setting (Cohen et al., 2005). The study observed various activities in the classroom like the teaching and learning materials, and seating arrangement to evaluate the factors influencing academic performance. The study also observed the student-student interaction and the teacher-student interaction. Findings of this study reveal that teachers in these schools lack basic knowledge and training on effective teaching styles for inclusion of HI learners. This is worrisome because teachers do not know how to handle an inclusive class. What they do is what they heard or read, but they do not have the skills to deliver an inclusive lesson, hence the challenges expressed above by the HI learners.

The findings of this study are also consistent with the above findings. One HI learner argued that if they are taught together with those without impairment they are likely going to perform better, and another HI learner felt that interactions with hearing learners would help HI learners improve their academic performance.

4.7 Discussion of Results/Findings

This section provides a textual interpretation and discussion of the results/findings generated from the research questions. The discussion follows the thematic analysis of data done above.

4.7.1 Types of Support Given to Learners with Hearing Impairment during Teaching and Learning in Mainstream Classrooms

An analysis of the NVIVO results showed a set of recurring themes such as sign language communication support, availability of school textbooks, hearing aids, teacher's notes, buddy system also known as pairing, hearing aids and sound amplifiers. Through observation, the

researcher noticed a lack of sign language communication support in class, which made it increasingly difficult for learners with hearing impairment to hear and participate effectively.

The majority of ordinary teachers tended to use gestures such as pointing and so did the learners.

It was observed that in resource rooms, the specialist teachers lacked even basic skills in sign language, and 4 out of the 12 HI participants did not have any knowledge of sign language. Hearing aids were proven ineffective in supporting participation. The buddy system was found to be more effective than the rest as HI learners learned from their fellow participants.

Researchers in the education of hearing-impaired learners attest to these findings. For instance, language is a very important tool of thought and higher cognitive functions; hence learners with hearing impairment, especially those ranging from severe to profound, use sign language. Unfortunately, in most inclusive classrooms, fellow learners without hearing impairment do not know sign language and even teachers. However, in the absence of sign language the problem lies with teachers more than among-st learners, because the learners still develop some gestures that they use to communicate and they are able to chat and understand one another easily. Dialogue is very crucial in the learning of children with hearing impairment because it is almost impossible to discuss the content between teachers and learners without dialogue. Dialogue helps learners with hearing impairment to feel understood as well as part and parcel of the class where their views are heard and are allowed full participation. This dialogue allows them to easily get help from hearing learners where they have problems understanding some concepts through spoken language (Rogoff, 1990).

4.7.2 How Specialist Teachers Complement Regular Teachers in Supporting Learners with Hearing Impairment in Mainstream Classrooms during Teaching and Learning Process

The findings reveal that the extent to which specialist teachers complement ordinary teachers depends on the extent of hearing loss, because others can hear using hearing aids and cochlear implants, while others depend on sign language. Teachers normally gauge the level of hearing before assigning a learner to a resource room or main class. The findings show that in more complex subjects such as Mathematics and Science, many HI learners would learn in the resource room, as opposed to other humanities and language-based subjects. Thus, in instances like these, specialist teachers and regular teachers need to work in sync to ensure that they are on the same page regarding the education of HI learners.

Similarly, studies on the collaboration between specialist teachers and regular teachers in the education of HI learners tend to lean on the positive side. A study conducted in Glasgow, United Kingdom (Vermeulen et al., 2011), revealed that majority of regular teachers expressed misgivings regarding the inclusion of HI students within the mainstream classroom due to their lack of expertise in dealing with HI children and expressed the need to include specialist teachers in the classroom. The class teachers also cited communication barriers as a key factor, more especially where signing and lip reading was involved. The teachers found themselves constantly repeating words and this meant most of the lessons were left incomplete. What prompted them to maintain a negative attitude towards the inclusion of the HI child, however, was the disruptive behaviours exhibited by some of the HI children such as responding rudely to questions and in most cases, ignoring the teacher when being addressed to, leaving the classroom without asking permission, handing in incomplete and often poorly written work (Vermeulen et al., 2011). As such, collaborative working is beneficial in increasing support for learners with hearing impairment.

4.7.3 The Extent to which Learners with Hearing Impairment Participate in Mainstream Classrooms during Teaching and Learning

The findings reveal that there is minimal participation in the mainstream classrooms for the HI learners. The respondents reported that classes are huge, making participation almost impossible to everyone. HI learners revealed that there is limited and sometimes no participation at all. It was observed that this is twofold. The HI learners themselves and the mainstream teachers were found to make less effort to participate in a classroom. Teachers reported that they take HI learners as equal to their counterparts and therefore cannot be given preferential treatment but as need avails itself, they are allowed to participate in anything. There is fear that if they are pushed too much, they can resent the classes and dislike school and formal education in general.

Teachers elaborated that they try their best to include HI learners but there are conflicting priorities also like finishing the class in time and making good use of the little resources available for facilitation of the classroom learning. In addition, the study found that the primary cause of lack of participation among HI learners was that most of them had not mastered sign language itself and as such preferred to use resource rooms where they have basic understanding with their peers. Moreover, the classroom was found to be intimidating and not friendly to HI learners as they feel they are not embraced yet as part of the class by peers and teachers. Poor family background and lack of parental support results in low self-esteem among HI learners, leading to low participation and low reception of lessons.

These findings correspond to the research findings of Lantaffi et al. (2003), whose research on HI students' views and experiences on their inclusion in mainstream schools revealed that a majority of the HI students preferred to be taught separately from the mainstream class. The students claimed that they preferred working with teachers of the HI rather than mainstream

teachers because the teachers gave them full attention and assisted them with their homework, exams and classwork, though a few of the students complained that teachers of the HI can be quite intrusive, always telling them what to do rather than allowing them to think for themselves. They were also thought to interfere with their friendships with other students. Only a handful expressed satisfaction working with their mainstream class teachers, who were often skilled with working with children with special needs. This means that the level of expertise and attention given to HI learners in mainstream classrooms has a significant impact on learners' ability to learn effectively in the classroom.

4.7.4 Experiences of HI Learners, Challenges and Opportunities for their Development in Mainstream Schools

The findings clearly show that hearing-impaired (HI) learners face various challenges in learning. The HI learners responded that they experienced segregation from their hearing peers due to a lack of proper channels of communication. As discussed in chapter two, HI learners have distinct communication needs. The various levels of their HI means that there are also different channels of communication. Hard-of-hearing learners use hearing aids for support while profound and partial prefer sign language and speech reading. A lack of awareness on the distinct communication needs of the HI learners made it increasingly impossible for HI learners to engage with their peers or participate effectively in the classroom.

These findings correlate with the findings of studies conducted in the United States (US) where research has linked HI in the school-age population with poor reading skills (California Deaf and Hard-of-hearing Education Advisory Task Force, 1999) and oral language (Bess & McConnell, 1981; Yoshinaga-Itano, Sedey et al., 1998); and serious limitations in educational performance relative to hearing peers, even when the hearing impairment is minimal (Doyle & Robson, 2002).

Learners with hearing loss are disadvantaged academically compared to their hearing peers (Asrat, 2013; Carrington & Robinson, 2006). HI learners have a lower grade than their class mates.

With the reasons highlighted above, HI learners are probably slow learners, which results in poor grades. This does not in any way mean that HI learners are inherently academically challenged, but it is these challenges they encounter in the process of learning that makes them slow in learning. In an environment where resources are there and they are being supported, HI learners are just as good as their hearing counterparts. Various researchers have found that low achievement is associated with learners who are HI (Heine & Slone, 2008; Marschark et al., 2002). Omutsani (2012) pointed out that HI learners have consistently trailed behind their hearing counterparts in academic performance.

There are various internationally approved techniques used in inclusive teaching and learning which are not practised at these primary schools which exclude HI learners. Leiter and Krauss (2004) and Larriba-Quest et al. (2020) identified unavailability of provisions and insufficient learning resources, among others, as institutional barriers that create hurdles in hearing-impaired learners' academic performance. This study agrees with Leiter et al (2004), that the schools under resourced situation is responsible for the downward performance of HI learners. The schools do not have charts for demonstrations, there are no books for references and furthering of knowledge after classes.

HI learners do not have hearing aids as they cannot afford and nobody has screened the HI learners for further assistance. Lack of hearing devices has jeopardized the learning process for the pupils and make their learning experiences bad. There is communication breakdown between the teacher and the pupil and to make it worse, teachers do not know sign language. The study revealed that

there is a huge shortage of special needs teachers and materials to meet the needs of pupils with HI. This tallies with the observation of the Salamanca World Conference (1994). The study also observed that all the pupils with HI did not have hearing aids.

This shows that HI learners' experiences are bad and unfortunate. Lack of proper training seconds study results of Gulzar and Qureshi (2016). Literature suggests that pupils who do not have full auditory access to spoken information in classrooms do not learn at normal rates and that the loss of hearing is often accompanied by reduced incidental learning, limited reading abilities and delayed acquisition of vocabulary (Ries, 1994; Ross, 1990). There is too much workload to take care of the HI if one is not properly trained, since they need special care.

4.7.5 Promoting Access to Quality Education for HI Learners in Mainstream Classrooms

The respondents suggested several strategies that can be used to help them (HI) learn effectively in mainstream classrooms. At the forefront of these strategies is the need for specialist teachers well versed in sign language, who can teach both in the mainstream and resource room. The HI respondents believe that learning together with learners without HI was a fast way of helping them learn fast. They also suggested that having materials such as books in the classroom and resource room was an effective way of learning and participating effectively in the classroom.

Currently there are a lot of opportunities mushrooming that schools and HI learners can grab to elevate inclusion in education sector. Government and Non-Governmental Organisations (NGOs), both local and international, are willing to assist in HI learning processes. Government of Malawi is a signatory to various United Nations (UN) charters and conventions; among those are the adopted Sustainable Development Goals (SDGs) or Global Goals which, on development goal number four, there is need of universal quality primary education. This goal aims at achieving

inclusive and quality education for all. The target is to eliminate all disparities in education and to make sure that there is equal and quality education for persons with disabilities.

The Government of Malawi is bound by this and gives report on the progress of implementing these SDGs. There have been various interventions by government to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. This is an opportunity for education promoters, HI learners and schools to exploit further. Government is willing to listen and help if it can, and open its arms to everyone and any entity that can help in inclusive education. There are special departments for quality inclusion education so that it is easier to implement these programmes.

Both local and international NGOs have made it their priority to promote quality inclusive education, which is a welcome development. These projects aim at screening and giving hearing aids, books, charts. Another good development is that some universities in Malawi are now offering programmes in special needs education. Notable example is Catholic University (CU) Nguludi campus, which for quite some time now has been churning out graduates in special needs education. These graduates are now policy makers, teachers and inclusive education promoters, programme managers that are championing the plight of HI learners.

A far greater opportunity for promoting access to quality education for HI learners is the acceptance of HI learners by the society. Society now has realised that HI humans are capable just like anyone, if they are given the right skills. Parents/guardians are sending their HI children to schools, unlike in the past where they were seen as a curse to the family. Perception and attitude of teachers and fellow learners is slowly changing. They have noticed that HI learners are as intelligent as their counterparts and that they only need timely and relevant assistance to prosper in their pursuit of

academic accolades. Ross and Madison (1982), in their research, concluded that there was superior performance noted for the HI learners in the regular schools which, according to Lynas (1986), is the most ideal placement for learners with hearing impairment.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

Encapsulating the experiences of the pupils, the study revealed that HI pupils are disadvantaged due to the structural, organizational and societal challenges they face. There is limited support due to lack of knowledge and resources. HI learners perform poorly compared to their counterparts because they lack the support and suitable resources they need.

The demographics of the participants are outlined, revealing a gender disparity among hearing impaired students and specialized teachers. There are more male hearing-impaired students compared to females, and more female specialized teachers. Reasons for these imbalances were not investigated but are noted to be common in educational settings. Additionally, there are fewer enrolled hearing-impaired students than those not enrolled, indicating a need for urgent intervention to address this issue.

Support for hearing impaired learners in mainstream classrooms is discussed. Peers play a crucial role in assisting these learners, offering explanations and note-taking help. Teachers also employ strategies such as speaking loudly and using pair-sharing activities to engage hearing impaired students. Continuing Professional Development (CPDs) helps tailor support to individual needs.

Ordinary teachers provide support by using audible voices, visual aids, gestures, and seating arrangements that benefit hearing impaired students. However, limited participation in mainstream classrooms is noted due to factors like large class sizes and communication barriers. HI learners themselves often feel intimidated and isolated, affecting their academic performance and self-esteem.

Challenges faced by hearing impaired learners include academic disparities compared to their peers, attributed to institutional barriers and lack of resources. Observations reveal that teachers lack proper training in inclusive teaching methods, further hindering HI learners' experiences. Nevertheless, opportunities for improvement exist, including government initiatives, NGO support, and increasing societal acceptance of HI learners' capabilities.

While there are significant challenges facing hearing impaired learners in mainstream classrooms, there are also opportunities for improvement through targeted interventions and inclusive policies. Addressing these issues is crucial for ensuring equal access to quality education for all students, regardless of hearing impairment.

5.2 Conclusion

This study aimed to assess the classroom support given to learners with hearing impairments in selected mainstream primary schools in Mzimba, Malawi. The research found that, while inclusive education regulations exist and certain efforts are being made to accommodate learners with hearing impairments, their practical implementation confronts substantial hurdles. These include poor teacher training in sign language, restricted use of assistive technology, huge class sizes, and insufficient coordination between ordinary and specialist teachers. The study also demonstrated that learners with hearing impairments are often passive participants in the classroom due to communication barriers and lack of targeted instructional strategies. However, examples of good practices were also observed, including the use of visual aids, peer support systems and teacher attempts to individualize instruction. These efforts though limited, show potential for growth and point to the possibility of more inclusive and equitable learning environment when adequate support is provided.

The findings suggest that without a deliberate and coordinated effort to strengthen inclusive education practices, learners with hearing impairment will continue to face significant barriers to accessing quality education. It is imperative that inclusive education in Malawi transitions from policy rhetoric to practical, sustainable action that places learners with diverse needs at the center of the teaching and learning process.

5.3 Recommendations

Based on the study findings, the following recommendations are made to enhance classroom support for learners with hearing impairment in mainstream schools:

- The Ministry should enhance inclusive education by increasing funding for assistive devices and inclusive learning materials, deploying more specialist teachers, and integrating sign language and inclusive pedagogy into teacher training programs. Regular monitoring and evaluation systems should be established to assess progress and improve service delivery for learners with hearing impairment
- There is also need for the ministry to strengthen inclusive education frameworks by embedding specific provisions for learners with hearing impairment in national policies. They should advocate for implementation, allocate adequate resources, and ensure that inclusion is integrated into broader development agendas, with clear accountability and evaluation mechanisms
- Schools should adopt peer support systems such as buddy programs and prioritize inclusive classroom arrangements, including front seating and the use of visual aids. They must foster a supportive environment by encouraging collaboration among learners and

ensuring access to communication tools like sign language. Partnerships with health services and NGOs can help provide essential support and resources.

- Teachers should adapt instructional methods by using gestures, visuals, and clear speech, while also developing individualized lesson plans for learners with hearing impairment. Ongoing professional development in inclusive teaching and sign language is essential. Teachers should also promote an inclusive classroom culture that values all learners equally.

5.4 Areas for Further Studies

This study had specific objectives which have been met, but there is room for more studies to be done in special needs education. Future studies should be longitudinal so that changes in the research findings can be tracked. This study is limited to HI primary school learners in the north only therefore, it is difficult to generalize the results to a wider society and to secondary and tertiary levels. Further study is needed at all education levels for comparison and acceptance in a wider society. Research with a large sample is what is needed.

Further studies can be carried out for other learners with different special needs in primary, secondary and tertiary schools, to compare the teaching and learning processes between those learners. The following key areas can be further addressed to advance the education of HI learners.

1. Conduct studies on the impact of socio-cultural factors in the academic development of HI learners in mainstream schools.
2. An examination of current education policies on inclusive education and their impact on the education of HI learners.

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APPENDICES

Appendix 1: Informed consent form



Mzuzu University Research Ethics Committee (MZUNIREC)

Informed Consent Form for Research in Master of Education, Teacher Education

Introduction

I am **Atupele Zidana Nampota** from **Synod of Livingstonia Education Department**. We are doing research on “Evaluation of the support that is given to learners with hearing impairment in mainstream primary schools during the process of teaching and learning”. This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can ask them of me or another researcher.

Purpose of the Research

This research aims to evaluate support given to learners with hearing impairment during the process of teaching and learning in an inclusive classroom. **Type of Research Intervention**

This research will involve your participation in focus group discussions, interviews, and observation.

Participant Selection

You are being invited to take part in this research because you are an important part of this school and the researcher believes that you have relevant information needed in the study.

Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate, nothing will change. You may skip any question and move on to the next question.

Duration

The research takes place for a period of **5 months**.

Risks

You do not have to answer any question or take part in the discussion/interview/survey if you feel the question(s) are too personal or if talking about them makes you uncomfortable.

Reimbursements

You will not be provided any incentive to take part in the research.

Sharing the Results

The knowledge that we get from this research will be shared with you and your community before it is made widely available to the public. Following, we will publish the results so other interested people may learn from the research.

Who to Contact

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact: Mrs. Atupele Zidana Nampota on 0888 144 747 or write to her at this address: CCAP Synod of Livingstonia, Education Department. P.O Box 112, Mzuzu.

This proposal has been reviewed and approved by the Mzuzu University Research Ethics Committee (MZUNIREC), whose task is to make sure that research participants are protected from harm. If you wish to find out more about the Committee, contact Mr. Gift Mbwele, Mzuzu University Research Ethics Committee (MZUNIREC) Administrator, Mzuzu University, P/Bag 201, Luwingu, Mzuzu 2, and Phone: 0999404008/0888641486

Do you have any questions?

Certificate of Consent

I have been invited to participate in research about Evaluating the support given to learners with hearing impairment in mainstream primary schools during the process of teaching and learning.

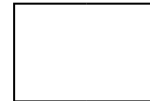
I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked, have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Print Name of Participant _____ **Signature of Participant** _____
Date _____ **Day/month/year**

If illiterate ¹

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Print name of witness _____ Thumb print of participant _____
Signature of witness _____ Date _____
_____ Day/month/year



Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands the research project. I confirm the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Signature of researcher /person taking the consent _____ Date _____
_____ Day/month/year

Appendix 2: Focus group discussion guide for learners with hearing impairment

School pseudo name: _____

Date: (DD/MM/YYYY) ____ / ____ / ____

Facilitators: _____

¹ A literate witness must sign (if possible, this person should be selected by the participant and should have no connection to the research team). Participants who are illiterate should include their thumb print as well.

of male participants: _____ # of female participants: _____

Ages represented in the group

Introduction and consent

General introduction: Good morning/afternoon, my/our name is/are _____. I am a postgraduate student at Mzuzu University, doing Master of Education, Teacher Education. I am conducting a study to evaluate the support given to you learners with hearing impairment in an inclusive setting like this school during the process of teaching and learning, as a requirement for me to be awarded my certificate. I am at your school to hear your opinions and views on the support that you are given during teaching and learning. Do you have some minutes to participate in this discussion?

Participation in these discussions is free and there is no obligation to respond, you can stop at any point.

No personal data will be shared with others and the information provided will be analysed anonymously and used confidentially.

Your views are valuable and important and will help a lot in the evaluation of the support that you receive.

Do you have any questions? Are you willing to participate in the group? Consent: Do you provide consent to document, use, store, and share the information provided for reporting and communication purposes?

☐ YES ☐ NO (if NO, say thanks and let the person leave)

May I begin now?

QUESTION

ANSWER

Do you enjoy learning in the same class as learners with hearing?

What is your relationship like with hearing learners?

Do you get any assistance from your peers with hearing?

What is your relationship like with teachers in your respective classrooms?

Do you think your teachers allow you to participate in classroom activities just like learners with hearing?

Are there any special teaching and learning materials that your teachers use to help you specifically during the process of teaching and learning?

What do you enjoy most during teaching and learning?

What challenges do you experience in your classes?

What could be the possible solution to the challenges that you experience?

Appendix 3: Observation checklist

I. Classroom Environment

- Is the classroom quiet and free of unnecessary noise?
- Are there any visual distractions that may affect the learning of learners with hearing impairment?
- Are the desks and chairs arranged in a way that is conducive to the learning of learners with hearing impairment?

II. Teacher's Interaction with the Learners

- Does the teacher interact effectively with learners with hearing impairment?

- Does the teacher use appropriate communication strategies such as sign language, lipreading, or visual aids?
- Does the teacher use clear and concise language when giving instructions?
- Does the teacher provide ample opportunities for learners with hearing impairment to participate in class discussions?
- Does the teacher give learners with hearing impairment extra time to respond to questions or assignments?

III. Classroom Materials and Technology

- Are there visual aids, such as pictures, diagrams, or charts, available to aid learners with hearing impairment?
- Are there hearing aids or other assistive technology available for learners with hearing impairment?
- Are these materials and technology readily available and easy to use?

IV. Student Support

- Are there other learners in the classroom who have been assigned to support learners with hearing impairment?
- Are these support-learners effectively assisting learners with hearing impairment?
- Are learners with hearing impairment being provided with additional support, such as note-takers or interpreters?

V. Overall Classroom Atmosphere

- Does the classroom atmosphere foster an inclusive learning environment for learners with hearing impairment?
- Is the teacher approachable and willing to provide extra support to learners with hearing impairment?
- Are learners with hearing impairment actively engaged in the learning process?

By using this observation checklist during a classroom observation, the researcher can assess the level of support provided to learners with hearing impairment during the process of teaching and learning in mainstream schools.

Appendix 4: Interview guide for teachers

1. Introduction

- a. Can you tell me a little bit about your teaching experience, including your experience working with hearing-impaired learners?
- b. How familiar are you with the support provided to hearing-impaired learners in mainstream schools?

2. Understanding the needs of hearing-impaired learners

- a. What are some of the unique needs and challenges of hearing-impaired learners in the mainstream classroom?
- b. How do you differentiate your teaching to accommodate the needs of hearing-impaired learners?
- c. How do you ensure that hearing-impaired learners are not left behind during class discussions and activities?

3. Collaboration and communication

- a. How do you collaborate with other teachers and support staff to ensure that hearing-impaired learners receive the support they need?
- b. How do you communicate with hearing-impaired learners to ensure that they are fully engaged in the learning process?
- c. How do you communicate with parents and caregivers of hearing-impaired learners to ensure that they are informed and involved in their child's education?

4. Teaching strategies and accommodations

- a. What are some of the most effective teaching strategies and accommodations for hearing-impaired learners in the mainstream classroom?
- b. How do you use technology to support hearing-impaired learners in your classroom?
- c. What are some of the most common accommodations that you make for hearing-impaired learners in your classroom?

5. Challenges and best practices

- a. What are some of the biggest challenges you have faced when working with hearing-impaired learners in the mainstream classroom?
- b. What are some of the best practices you have developed for working with hearing-impaired learners?
- c. What advice would you give to other teachers who are working with hearing-impaired learners for the first time?

6. Conclusion

- a. Is there anything else you would like to share about your experiences working with hearing-impaired learners in the mainstream classroom?

Thank you for your time and insights

Appendix 5: Interview guide for Primary Education Advisors (PEAs)

1. Introduction

- a. Can you tell me about your role as a Primary Education Advisor, including your experience working with learners with hearing impairment in mainstream schools?

- b. How familiar are you with the support provided to hearing-impaired learners in mainstream schools?

2. Understanding the needs of hearing-impaired learners

- a. What are some of the unique needs and challenges of hearing-impaired learners in the primary education setting?
- b. How do you work with teachers and support staff to ensure that hearing-impaired learners receive the support they need?
- c. How do you ensure that hearing-impaired learners are not left behind during class discussions and activities?

3. Collaboration and communication

- a. How do you collaborate with teachers, support staff, and parents/caregivers of hearing-impaired learners to ensure that they receive the support they need?
- b. How do you communicate with hearing-impaired learners to ensure that they are fully engaged in the learning process?
- c. How do you ensure that all stakeholders are informed and involved in the education of hearing-impaired learners?

4. Teaching strategies and accommodations

- a. What are some of the most effective teaching strategies and accommodations for hearing-impaired learners in the primary education setting?
- b. How do you encourage teachers to use technology to support hearing-impaired learners in the classroom?
- c. What are some of the most common accommodations that teachers make for hearing-impaired learners in the primary education setting?

5. Challenges and best practices

- a. What are some of the biggest challenges you face when supporting hearingimpaired learners in the primary education setting?
- b. What are some of the best practices you have developed for supporting hearingimpaired learners?
- c. What advice would you give to other Primary Education Advisors who are working with hearing-impaired learners for the first time?

6. Conclusion

- a. Is there anything else you would like to share about your experiences working with hearing-impaired learners in the primary education setting?

Thank you for your time and insights.

APPENDIX 6: Focus Group Discussions Guide for Ordinary Learners

QUESTION

ANSWER

Do you have any learners with hearing impairment in your classes?

How do you interact with them during the process of teaching and learning? What language do you use?

Do you think teachers give them equal opportunity as you to participate in classroom activities?

Have you ever rendered any classroom help to a learner with hearing impairment in your class? What support exactly?

Do you think learners with hearing impairment enjoy being in this school?

Can you say that the classroom environment is conducive for learners with hearing impairment? How?

What challenges do you think learners with hearing impairment experience during the process of teaching and learning?

What could be the possible solution to those challenges?