

DISSERTATION SUBMISSION

EXPLORING GRADE 1 TEACHERS' EXPERIENCES WITH TEACHING READING TO DEAF LEARNERS IN SPECIAL SCHOOLS

BY

MASHIGE LUYANDA 2017088291

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Supervisor: Dr. B.N. Hadebe- Ndlovu

Co-supervisor: Dr.B. Manditereza

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transforming
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impact, and care.*

DECLARATION

I, Luyanda Mashige, declare that the thesis, exploring Grade 1 teachers' experiences with teaching reading to Deaf learners in special schools, submitted for the qualification of Master of Education in Early Childhood Development and Learning at the University of the Free State is my own independent work. All the references that I have used have been indicated and acknowledged by means of complete references.

I further declare that this work has not previously been submitted by me at another university or faculty to obtain a qualification.

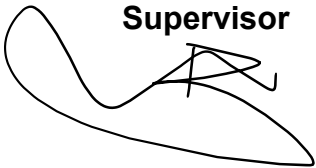
Student

Luyanda Mashige

Signed 

Date: 04 August 2024

Supervisor



Date: 12 August 2024

DEDICATION

I dedicate this project to God Almighty my creator, my strong pillar, my source of inspiration, wisdom, knowledge and understanding. He has been the source of my strength throughout this journey and on His wings only have I soared. I also dedicate this work to my mother, Lufuno Netshimbupfe who has encouraged me all the way and whose encouragement has made sure that I give it all it takes to finish that which I have started. I am dedicating this to my late grandmother Tshimangadzo Tshigayo Margret Mashige gone forever away from our loving eyes and who left a void never to be filled in our lives

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I would like to extend and express my sincere appreciation and gratitude to all those who helped me in completing this project

My deepest gratitude goes to God who has provided all that was needed to complete this project. There was never a lack or want. Throughout this entire study, He took care of everything that would have stopped me in my tracks and strengthened me even through my most difficult times.

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ABSTRACT

This study aimed at exploring the challenges that teachers encountered when teaching reading to Grade 1 Deaf learners. The study was guided by the following objectives: Exploring how Grade 1 teachers teach reading to Deaf learners in special schools. Establish the challenges Grade 1 teachers experience when teaching reading to deaf and to determine the strategies that Grade 1 teachers use when teaching reading to Deaf learners.

In order to achieve the objectives, participants were purposively sampled and were drawn from two selected schools. The sample consisted of four (4) special education teachers for Deaf learners picked from Gauteng province. For this study, two research instruments were used for data generation, namely, semi-structured interviews and classroom observations. The study employed the qualitative method to get the answers to the research question.

The finding therefore reveals that Deaf learners learning reading need to be exposed to learning resources which meet their unique reading needs. These resources should be special resources beyond the normal resources used in a regular reading class. It is evident that in order to teach reading to Deaf learners' teachers should Set Deaf learners up for success by adapting their teaching methods to support their learning

The study found that the major challenges that teachers faced when teaching reading to Deaf learners was that there were not adequate instructions and teaching resources to sufficiently teach reading to these learners. This included specialised guidelines from the curriculum development specialists.

Arising from the findings of this study, various recommendations have been made, among which is that Deaf learners learning reading for comprehension skills need to be exposed to learning resources which meet their unique reading needs. These resources should be special resources beyond the normal resources used in a regular reading class. It is evident that in order to teach reading to Deaf learners' teachers should Set Deaf learners up for success by adapting their teaching methods to support their learning. Moreover, there is a need for in- service training on both education managers and educators in the uses of South African Sign Language. Learners in teacher training institutions wishing to educate Deaf learners need to be provided with

South African Sign Language skills before entering schools for the Deaf at a pre-service level.

Key words: Foundation Phase teachers, Deaf learners, Inclusive Education, Reading, South African Sign Language and social constructivism

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LIST OF ACRONYMS

CAPS	Curriculum and Assessment Policy Statement
DBE	Department of Basic Education
DeafSA	Deaf Federation of South Africa
DoE	Department of Education
SA	South Africa
SASL	South African Sign Language
SASLI	South African Sign Language Interpreter
SBST	School Based Support Team
PIRLS	Progress in International Reading Literacy Study
B.Ed.	Bachelor of Education (Degree)
PGCE	Post Graduate Certificate in Education
WHO	World Health Organisation
ZPD	Zone of Proximal Development
SNE	Special Needs Education
SIAS	Screening, Identification, Assessment & Support
PIRLS	The Progress in International Reading Literacy Study
LSEN	Learners with Special Educational Needs

CHAPTER 1: ORIENTATION TO STUDY

1.1 INTRODUCTION

Deaf learners struggle with developing essential literacy skills, particularly reading, which often lags behind hearing children (Benedict, Rivera & Antia, 2018:26). Identifying and addressing reading difficulties is crucial, as reading comprehension is a constant concern. Learning to read at age-appropriate levels is a problem for many, but not all, learners who are born deaf. Regardless of whether they speak or sign, the median reading level of Deaf learners indicates subpar achievement (Traxler, 2020).

Research on Deaf learners' reading outcomes reveals potential weaknesses, despite advancements in hearing-aid technology and medical management (Davis, Elfenbein, Schum & Bentler, 2019). Deaf learners, including those with mild to moderate hearing loss, still face variable outcomes in reading abilities, particularly phonological awareness and language abilities. This raises questions about reading skill development for deaf readers.

Deaf learners struggle with basic phonology and decoding abilities, affecting their ability to recognize words and understand sentences, and lack age-appropriate spoken language abilities, making reading literacy development slow and challenging (Kyle & Harris, 2021).

In South Africa, reading difficulties among Deaf learners have been recognized and appreciated as an area which needs much focus and attention. According to South Africa's Education White Paper No. 6 of 2001 (EWP6), Deaf learners tend to lag behind specifically in tasks which require reading for comprehension. Chamberlain (2022) argues that reading development is contingent on a fully developed primary language and that incomplete or inconsistency in signed or spoken language may affect the development of reading proficiency.

1.2 BACKGROUND OF THE STUDY

In South Africa, teaching reading skills to Deaf learners is the biggest challenge (Shenton, 2021). The Progress in International Reading Literacy Study (PIRLS) is a comparative international evaluation that tracks learners reading progress around the globe. PIRLS has been administered every five years since 2001. In 2001, 2006, 2011,

and 2016, South Africa participated in all four PIRLS evaluations. South African learners performed worse than the average in every evaluation.

According to Domagala (2022), teachers faced difficulties in finding the appropriate media for the Deaf learners. The learner's challenge to hear any materials and media in the form of audio or sounds made the teachers needed to adapt and deliver the materials in appropriate ways with the right media. Weber (2020) argues that often school are not capable of supplying Deaf learners with the proper technology that could significantly increase the learning development process. This could be any forms of assistive technology and whiteboards.

Deaf learners typically struggle with acquiring crucial literacy skills and/or obtaining reading abilities past the elementary level. "Reading comprehension is an ongoing concern for Deaf learners" (Benedict et al., 2019:38) making the topic of reading extremely important. Sullivan and Oakhill (2020:104) mention that "there has been relatively little progress in improving narrative comprehension in deaf readers despite decades of research" proving a need for further research into this topic

The South African Department of Education (DoE) (2002) reported in EWP6 that it allows for special schools for learners with the most intense barriers to education. In addition, most Deaf people see their primary barrier to education as a linguistic barrier, rather than a barrier of 'severe challenge'. The implementation of EWP6, according to Makola (2021), has gone too slowly. A 20-year implementation plan included in the first release of EWP6 in 2001 called for the establishment and operation of an inclusive educational system by 2021. There has not been much advancement. Motala and Carel (2019) argue that early speech development alone cannot guarantee language and reading abilities.

Deaf learners develop language and literacy skills in somewhat of a different way than hearing learners. One example of this is incidental learning. Learners who are hearing acquire some of their language from parents, siblings, TV and radio. Deaf learners are less exposed to language during their early years, especially if their parents are hearing and do not learn sign language (SL). As Friedmann and Szterman (2020:212) note, "Many learners whose hearing is impaired receive limited language input during the sensitive period for language acquisition". In addition to limited language input,

many of the strategies used to help hearing learners improve their literacy skills often need to be modified for Deaf learners. This research aims to discover strategies for improving reading comprehension skills in classrooms with Deaf learners, modifying strategies used for hearing learners during the sensitive period for language acquisition.

According to Shukla and Agrawal (2019), reading is the cornerstone of all learning, and improving a learner's reading skills is critical to their ability to fully develop as an individual. Reading, writing, speaking and listening are all part of literacy. Reading is required for learners to interact with the written word in their daily lives. Arndt and Lieberman (2020) add that reading is an important part of a learner's development and exposing learners to books at a young age aid in their vocabulary development and language skills. Late detection of learning challenges can be caused by being difficult to diagnose, as there is no definitive list of symptoms that applies to every child (Cortes & Napier, 2015). This study explores multiple strategies that teachers can use with Deaf learners to support the development of good reading skills

1.3 PROBLEM STATEMENT

The majority of Deaf learners have difficulties developing critical reading skills and moving past the foundational stage of reading. For Deaf learners, reading is a constant worry.

Learners with hearing impairment continue to perform below average in most academic disciplines in South Africa. The learners' performance in subjects that require extensive reading to enable them to comprehend the written work shows the serious difficulties they experience in reading comprehension tasks. Unfortunately for them, all examinable subjects designed for Deaf learners are presented in the English language, all of which must be read.

One of the pedagogical problems encountered by Special School teachers in teaching Deaf learners is the difficulty in teaching communication and language skills (Bloese and Joseph, 2022). Deaf learners, especially those who are just learning in early grades, faced three problems, namely not being able to hear, not being able to pronounce words verbally, and also not understanding sign language. It is not easy for teachers to teach communication skill and language ability to deaf learners.

Therefore, it is necessary to find a solution, by identifying the teachers' pedagogical problems in teaching deaf learners

Nationwide awareness of the advantages of early reading success and the severe consequences of early reading failure is growing (DoE, 2002). Recent evaluation exams have shown that academic achievement among learners in South African schools is unacceptably low. Research in to the academic achievement of learners who are deaf often finds that the performance of many learners in this population falls significantly below that of their typical hearing peers on many measures and across many domains (Hoffman & Wang, 2020).

Naiman (2020), maintains the importance of a social learning curriculum for learners who are deaf, and Hintermair (2022) reflects the crucial role of empowerment of parents of Deaf learners to manage their stress and resources. Educating Deaf learners is considered a process that consists of determining eligibility, delivering special education services, and the final step of this process is evaluating. Eccarius (2021) describes the education of Deaf learner as a complex process which requires appropriate placement, identifying the mode of learner's learning, modified curricula, using audio logical technology, schools and family services, and identifying strengths and needs of targeted learners through psycho-educational and audio logical assessment. The process of educating Deaf learners is affected by different factors like attitudes, qualified and skilled teachers, quality of services offered to schools and families, acoustic environment, family environment, type and degree of hearing loss, language and speech abilities, and the existence of additional disabilities (El-Zraigat, 2022).

Sullivan and Oakhill (2018:32) mention that "there has been relatively little progress in improving the ability to read to Deaf learners despite decades of research", proving a need for further research into this topic. Unfortunately, "One of the major challenging tasks of educators of Deaf learners' is to enhance the reading comprehension performance of their learners" (Nikolarazi, Vekiri & Easterbrooks, 2019:257). Part of this challenge is that learners who are deaf often fail to grasp that the point of reading is to understand what they are reading, not just read the words (Benedict et al., 2015).

By conducting this research, my goal is to explore the challenges that Grade 1 teachers face when teaching literacy in classrooms with learners who are deaf in order

for them to develop or improve their reading skills. The lack of literacy skills in Deaf learners leads to their struggle in the secondary grades as well as throughout their college careers or in the post high school job market, unlike their hearing peers.

1.4 PURPOSE OF THE STUDY

The purpose of this research study is to identify the difficulties that Grade 1 teachers encounter when teaching reading to Deaf learners. Furthermore, it aims to explore the approach and methods of teaching used by teachers when teaching reading to Deaf learners. More specifically, the study focuses on methods of teaching, resources used and provisions in place for teaching/learning for learners who are deaf. As stated earlier, this research is an attempt to extend the academic debate around the understanding of Deaf learners concerning their learning challenges when it comes to reading.

1.5 RESEARCH AIM AND OBJECTIVES

This study seeks to explore Grade 1 teachers' experiences with the teaching of reading to Deaf learners in special schools.

1.5.1 Research Objectives

- a) Explore how Grade 1 teachers teach reading to Deaf learners in special schools.
- b) Establish the challenges Grade 1 teachers experience when teaching Deaf learners.
- c) Determine the strategies Grade 1 teachers experience when teaching Deaf learners.

1.5.2 Research Questions

The main research question for this study is: what are Grade 1 teachers' experiences with teaching reading to Deaf learners in special schools?

1.5.3 Sub-questions

1. How do Grade 1 teachers teach reading to Deaf learners?
2. What challenges do teachers face when teaching reading to Deaf learners?

3. What strategies can be used to successfully support the development or improvement of reading to Deaf learners?
4. Why do Grade 1 teachers' experience difficulties when teaching reading to Deaf learners?

1.6 RATIONALE OF THE STUDY

I was motivated to conduct this study for two different reasons. Firstly, working at a school for the Deaf served as my source of inspiration for conducting this research. Learners who struggle academically at schools without the resources to support learners in need of special education is something I have witnessed first-hand. According to my observations, there seem to be weaknesses in the educational system. This circumstance prompted me to interact more directly with these learners, which enabled me to see how unhappy they were when their educational needs were not met and how this hurt their self-esteem and slowed their progress.

Secondly, I was inspired to conduct the study after observing that more learners, particularly Deaf learners, are having difficulties with reading. In a report based on a survey by the Paper Manufacturers Association of South Africa (2023), 41% of South Africans own fewer than 10 books, contributing to the country's reading crisis. It would not be an overstatement to call it a crisis. In 2016, the PIRLS stated that South Africa came in last place out of 50 nations. The study evaluated learners in their primary schooling on their reading comprehension. According to the study, 78% of South African learners at this level were unable to read for meaning.

1.7 SIGNIFICANCE OF THE STUDY

The findings of this study may be important for the Department of Basic Education (DBE) policy makers and implementers. The findings may also be important for curriculum development subject specialists to collaborate with teachers for the Deaf learners to work out appropriate curriculum materials for the Deaf learners at Grade One level.

For the classroom teachers in special schools and units for the hearing impaired, the findings may guide them as they share their experiences at school and zone levels. The findings may also be useful to parents of Deaf learners in that they may use the

suitable language (signs) at home which may also be used at school. In this way, the learners' language skills may develop at a faster rate. This may enhance the learners' academic performance.

The significance of this study was that the results obtained from the study would be used by curriculum developers to develop suitable reading strategies to be adopted by Deaf learners. In addition, the results of this study could serve as a broad outline for special education practice in promoting the teaching of reading to Deaf learners.

1.8 SCOPE OF THE STUDY

The study explored teachers' experiences with teaching reading to Deaf learners in Grade 1. This study was confined to studying the teacher's experiences when teaching reading to Deaf learners in special schools. The study was conducted in Gauteng province. Both schools that participated in this study are schools for the deaf. The language of teaching and learning in these schools is South African Sign Language (SASL).

1.9 DEFINITION OF KEY TERMS

A few key terms are defined below and will be used in the study with the following meanings.

- Inclusive education: The United Nations Educational, Scientific, and Cultural Organization (UNESCO, 2019) states that inclusive education means that all students can access and fully participate in learning alongside their similar-aged peers. Teaching and learning strategies are adjusted to meet students' individual needs. Inclusive education encompasses all aspects of school life and is supported by culture, policies, programs and practices.
- Literacy is the ability to read, write, speak and listen in a way that lets us communicate effectively and make sense of the world (KPMG, 2019).
- Reading is a process which involves the active construction of meaning from text using linguistic knowledge and the decoding of letter and words as well as higher order process such as metacognitive strategies (Sasha, 2023).

- Reading strategies refer to deliberate, conscious techniques that readers employ to enhance their comprehension or retention of the textual information (Brown, 2020).
- Sensory impairment is a condition in which one or more of our special senses (sight, hearing, smell, touch, taste, and spatial awareness) is no longer normal. Sensory impairment is the common term used to describe deafness, blindness, visual impairment, and hearing impairment (Rosenberg, Westling & McLeskey, 2021).
- Sign Language is a type of language that uses hands, eyes, the mouth, body movements sometimes accompanied by gestures to communicate with individuals with hearing impairments (Charles, 2019).
- Special Needs Education, also known as special education, refers to separate schools, classes, or instruction designed specifically for learners with special educational needs (LSEN) (UNESCO, 2019).

1.10 PRELIMINARY LITERATURE REVIEW

Reviewing the related literature maintains that Deaf learners are considered exceptional learners (Hallahan, Pullen, Kauffman & Badar, 2019). These learners require special services which must be offered by qualified and skilled teachers in order to respond to their unique needs (Beveridge, 2021). In addition, hearing loss significantly influences the language and speech development of Deaf learners which negatively affects their academic achievement, social and emotional interaction and cognitive milestones (Moore, 2021). Jordan (2017) reports that Deaf learners had poor reading skills and lacked adequate reading skills in general. Bunch (2019) indicates that Deaf learners need a special language, speech and audio logical rehabilitation curriculum. In this context, Syverrud, Guardino and Selznick (2020) emphasise the effectiveness of teaching phonological skills to a Deaf learner; likewise, Livingston (1999) stresses that educating Deaf learners should be linked to language learning with content learning.

The first section of this literature review explores the conceptual framework of the study. The next section discusses the reading development of Deaf learners, followed

by the various challenges faced by teachers when teaching reading to Deaf learners. Strategies to support the development of reading to Deaf learners are presented next. Lev Vygotsky's social constructivism theory is discussed as a theoretical framework for the study. The literature review concludes with a summary.

1.10.1 Conceptual Framework

1.10.1.1 Reading development of Deaf learners

Studies indicate that Deaf learners who have learned SL in early childhood demonstrate greater advancement in reading skills (Easterbrooks & Huston, 2018). Research on reading outcomes of Deaf learners has long shown potential weaknesses (Davis, Elfenbein, Schum & Bentler, 2018) and despite advances in hearing-aid technology and medical management (e.g., improved hearing aid technology, cochlear implants), Deaf learners continue to have widely variable outcomes in regard to reading abilities, especially phonological awareness and language abilities (Nitttrouer 2019). Moreover, there continues to be a significant risk for poor reading outcomes in all learners hearing loss.

Development of reading skill in Deaf learners without age-appropriate spoken language skills will be difficult and slow (Musselman, 2020). Access to auditory information will lead to the use of the letter-to-sound correspondences and a basis for phonological decoding. Deaf learners have problems with fundamental skills such as phonology and decoding that will affect word recognition (Kyle & Harris, 2021) as well as language skills such as syntax and grammar that influence sentence comprehension.

Staden (2023) contends that a Deaf learner does not necessarily require constant additional help but rather a mindful and sensitive approach to teaching the whole class; for example, not facing the whiteboard to speak, minimising background noise and using visual aids as much as possible. Furthermore, schools that have the budget to employ one, could employ dedicated staff, such as a communication support worker or learning support assistant can provide hugely valuable help. Whether in the classroom all or some of the time, they can ensure that the learner is supported while you are able to give proportionate attention to other learners.

In a study by Clark (2023) on how the Deaf learn to read, the findings revealed that reading requires two related capabilities. First, one must be familiar with a language and second, one must understand the mapping between that language and the printed word. The findings indicate clearly that Deaf learners are disadvantaged on both counts, but some Deaf learners do read fluently. The findings also show that individuals with good signing skills are not worse readers than individuals with poor signing skills. From this study, it is evident that the skill in signing does not guarantee skill in reading. Mayberry and Eichen (2019) show that learners who are exposed to SL late in childhood turn out to be less proficient and may never catch up in adulthood than learners who are exposed to SL in early childhood. The findings suggest that Deaf learners read by using a code that is not based on sound and that Deaf learners of Deaf parents are better readers than Deaf children of hearing parents. One reason for this is that Deaf learners of Deaf parents are more likely to have their hearing loss identified earlier and get the appropriate educational support. In this way, they become fluent in SASL or other SL.

Grushkin (2018) argues that fingerspelling provides a linguistic link to English vocabulary and syntax. Padden and Ramsey (2021) investigated the reading ability of Deaf learners in the first grade. The results revealed that knowledge of specific South African Sign Language (SASL) structures, including fingerspelling, correlates with reading achievement. Furthermore, in their study, learners who scored better on reading tests were competent in associative skills, such as the ability to write down words that were finger-spelled to them as well as the ability to translate initialised signs. To add, looking specifically at performance on the fingerspelling tasks, fingerspelling ability significantly correlated with reading comprehension: “better readers were better at recognising finger spelled words and writing them down in print” (Wiles, 2019).

1.10.1.2 Challenges faced by teachers when teaching reading to Deaf learners

A number of scholars have conducted studies regarding the challenges that teachers encounter while teaching Deaf learners to read; some of which this study has highlighted. Marschark (2019) revealed that reading achievement among Deaf learners typically lagged significantly behind hearing peers. Difficulties in comprehending SL just as the texts suggested that difficulties frequently observed in

reading from the text by the Deaf learners, could involve more than just reading. Difficulties in phonemic awareness (Harris & Beech, 2020), vocabulary, syntax, the use of prior knowledge and metacognitive skills (Jackson, Paul, & Smith, 2017) were some of the factors reported to influence Deaf learners' development of literacy. This demonstrated that many Deaf learners seemed to have difficulties with both low-level and high-level reading skills (Kelly, 2021). Loeterman, Paul and Donahue (2020) also believed that for any instructional reading programme to be effective, it needed to address the development of skills such as word identification, word knowledge and comprehension.

Education is a fundamental right, which extends equally to all learners throughout South Africa, and it is the responsibility of the education system to develop and sustain learning. The Draft Conceptual and Operational Guidelines for the Implementation of Inclusive Education (DoE, 2002:130) state that, "a complex and dynamic relationship exists between the learner, the centre of learning, the broader education system and the social, political and economic context of which they are all part". Each of these plays a major role in whether effective learning and development occur. If a problem occurs in any of the above components, it impacts the learning process, causing learning breakdown or exclusion. Thus, if the system fails to meet the different needs of a wide range of learners or if problems arise in any of these components, the learner or the system may be prevented from being able to engage in or sustain an ideal process of learning (DoE, 2002:130).

1.10.1.3 Strategies to support the development of reading to Deaf learners

Multiple different strategies have been tested in classrooms with Deaf learners with the goal of increasing their reading skills to a level comparative with their hearing peers. In other words, it is the duty of educators of the Deaf to identify their learners needs and explore strategies to help them improve their reading skills. In agreement, Dimling (2020) states that "intense, targeted interventions that use evidence-based approaches are imperative for learners with a disability such as hearing loss to minimise its impact and maximise language development". These concepts are all good reasons to regard the research of reading strategies that can support Deaf learners as extremely important for educators. Miller (2019) conducted research regarding reading comprehension and its relation to the amount of functional reading

that Deaf learners may have, and when his finding did not confirm his hypothesis, he stated that “focusing on reading strategies of individuals with hearing loss may be a more fruitful approach to understanding the underlying causes of their reading problem”.

Puente, Alvarado and Valmaseda (2019) observed that the teaching/learning methodologies for teaching the Deaf first engaged oral and written bilingualism. These modes were characterised by attributes such as signed speech which were used to complement and reinforce spoken communication, fingerspelling used as a support strategy in reading, SL and cued speech. Gates and Chase (2019) observed that the Deaf learn spelling by use and perception of visual forms. Likewise, the teachers could use manipulative visual language tools to help children visualise sounds they could not hear (Berke, 2018). It naturally follows that guided reading for the Deaf learners, would, therefore, highly be dependent upon the effectiveness of the teacher/teaching processes.

1.10.1.4 Theoretical framework: social constructivism

A theoretical framework in a research study, according to Omirin and Falola (2021), is the framework that supports and directs the structure of a study. In other words, a theoretical framework is an effort to create a broad explanation for a certain phenomenon. According to the theory, language and culture serve as the frameworks through which people interact with one another, perceive their surroundings and comprehend them. Language and culture, in Vygotsky’s (1978) view, are crucial to both the intellectual growth of people and how they view the world.

According to Vygotsky (1978), social learning actually promotes cognitive development throughout one’s lifetime. In other words, learners can complete any learning task, no matter how challenging, with the help of an adult or a group of their peers. This theory supports the development of opportunities for learners’ collaboration with the instructor and peers in the creation of knowledge and understanding. Kapur (2018) noted that the social construction of knowledge occurs in a variety of contexts and ways. It could be accomplished through group discussions, teamwork, or any type of educational interaction in a place of worship, on social media, or in the marketplace. Learners gain the knowledge and experience necessary for

leading fulfilling lives as they engage with others and their surroundings, both material and immaterial.

Luke (2022) attests that social constructivists see reading, like learning, as social practice. The social context affects when you read, what you read, where you read, who you read with and, of course, why and how you read. Interacting with text can involve practices as diverse as reading instructions, scanning a newspaper or reading an academic article. Thus, when teachers are designing curricula for reading in SL classes, teachers first need to ask themselves what their learners need to be able to do in terms of social practice.

In social constructivism, human interests are important for research purposes and knowledge is constructed through social interaction. Such knowledge is shared rather than an individual experience (Gergen, 2019). According to Leigh (2020), constructivism implies that reality is constructed through human interaction, knowledge is a human product and is socially and culturally constructed. Individuals create meaning through their interactions with each other and with the environment in which they live. Social constructivism emphasises the importance of culture and context in the process of knowledge construction and accumulation. Social constructivism impacts strongly on the way in which people learn. Learners add to and reshape their mental models of reality through social collaboration, building new understandings as they actively engage in learning experiences (Khalifa, 2019). In addition, scaffolding, i.e. guidance and support, plays an important role in the learning process.

To understand Vygotsky's work, two key principles must be understood: the More Knowledgeable Other (MKO) and the zone of proximal development (ZPD). The MKO is self-explanatory – it refers to someone who understands or has a higher ability level than the learner in relation to a specific task, process or concept. Although the implication is that the MKO is a teacher or an elderly person, this is not always true. Many times, a child's peers or an adult's children will have more knowledge or experience. The key to MKOs is that they must have (or be programmed with) more knowledge about the topic being learned than the learner. The concept of the MKO is inextricably linked to Vygotsky's second major principle, the ZPD. The MKO and ZPD,

when combined, form the foundation of the scaffolding component of the cognitive apprenticeship model of instruction.

1.10.2 Summary of Preliminary Literature Review

The review of the literature has shown that Deaf learners have experienced reading challenges and the various interventions designed to address these challenges have existed for a very long time. In the conceptual framework, there are appropriate strategies that can be used to assist Deaf learners to acquire competence in reading leading to better performance in academic tasks. Inappropriate strategies may lead to difficulties in reading; hence, the learner performs poorly in subjects that require extensive reading skills. This failure leads learners to develop a poor self-concept and results in difficulties with reading. The literature on Deaf learners in South Africa also describes how the government has tried to address the many difficulties of Deaf learners by establishing special education schools. The literature has, however, shown that there are no quick fixes or simple answers to these problems. Finding practical, context-appropriate solutions in this field calls for ongoing research and consistent approaches.

1.11 RESEARCH METHODOLOGY

In this section, I provide an overview of research design and methodology that will be used to conduct this research study. The research approach will be discussed after the research paradigm. The study site will then be discussed, and finally the research design. There are also descriptions of the population, sample size, sampling techniques and participant selection. The data collecting and analysis processes, as well as the instruments for measuring the trustworthiness and piloting of the instrument are covered.

1.11.1 Research Paradigm

The interpretive paradigm was selected. This paradigm will enable the researcher to gain access to participants' perspectives and real meanings of social phenomena (Neuman, 2017). With this perspective in mind, the interpretive paradigm is appropriate for this study because the participants teach in their own settings and draw on a variety of approaches based on their personal experiences and beliefs about how

to best teach literacy to first-graders who are struggling with reading. The majority of our knowledge, is learned through social constructions such as language, consciousness, shared meanings, records, and other artefacts that have meaning in people's lives (Bryman & Bell, 2020). As a result of their cultural and historical influences, researchers have their own understanding, interpretations and world views about the phenomenon in question (Miles & Huberman, 2020). In this study, the researcher is looking to discover more about the participants' social lives and connect what they have gone through to the cultural, religious, and professional values and beliefs that have an impact on Deaf learners. The benefit of an interpretive study, according to Wingate (2019), is that it enables researchers to get rich, in-depth data from participants.

1.11.2 Research Approach

The study used a qualitative research approach. A qualitative approach is an investigation that seeks to explore and comprehend a phenomenon through a detailed, holistic picture, analyses words, conducts interviews with a variety of people and presents informants' perspectives in-depth (Creswell & Clarke, 2007). The benefit of using a qualitative approach in this study is that it will enable the researcher to gain a comprehensive understanding of events as they happen (Cohen, Manion & Morrison, 2011). It will also aid the researcher in developing a deeper comprehension of teachers' experiences in real-world situations. McMillan and Schumacher (2016) state that the qualitative research methodology delves into a bounded system or a case in depth, using multiple data sources found in a setting. The researcher engaged with participants who regularly work with Deaf learners. The phenomenon is observed in its natural setting by the researcher in order to understand the interactions between participants and Deaf learners.

1.11.3 Design of the Study

In this study, phenomenological research design was used. Phenomenological research is a qualitative research approach that seeks to understand and describe the universal essence of a phenomenon (Groenewald, 2020). In addition, the approach investigates the everyday experiences of human beings while suspending the researchers' preconceived assumptions about the phenomenon. In other words,

phenomenological research studies lived experiences to gain deeper insights into how people understand those experiences. A phenomenological research design enables a researcher to understand a phenomenon's universal nature by exploring the views of those who have experienced it. By using this research design, the researcher was able to explore teachers' experiences with the teaching of reading to Deaf learners in special schools.

1.11.4 Study Site

The study took place at two special educational needs schools which caters for Deaf learners in the South African province of Gauteng. The name of the school will not be disclosed in order to maintain confidentiality and anonymity, as well as to protect the rights and welfare of the participating teachers. The schools accept and educate Deaf learners. The institutions serve learners from all races in South African society and is representative of average conditions or circumstances in special education centres.

1.11.5 Population, Sample Size and Sampling Procedures

Polit and Hungler (1999:37) refer to the population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. In this study, the population was South African teachers of all races, age groups, educational status, socio-economic status and residential areas, who teach Deaf learners at special schools.

Sampling is the systematic choice of a subset of participants whose characteristics are truly representative of the entire population under study (Morrow, 2015). A sample aims to provide the most comprehensive data imaginable (Morrow, 2015), which helps to achieve the study's and the research's objectives.

I used to low-perform schools in Quintile 1 as the study sites. The school's atmosphere, organisational structure, and amount of funding allotted to each learner by the government are determined by the quintiles (Motala & Carel, 2019). The study's participants were Grade 1 teachers. Four Grade 1 Foundation Phase teachers from two separate schools took part in this study. With regard to selecting these teachers, purposive sampling was used due to a variety of factors, including the fact that they are public school teachers and the length of time they have worked in LSEN facilities.

1.11.6 Instruments for Data Collection

Semi-structured interviews and classroom observation were chosen as the two instruments for collecting data. To collect detailed information from the teachers about how they teach reading to Deaf learners, the interview method was suitable. The researcher was able to accurately record every interviewee's words with the aid of voice recordings. The researcher used observation as another method for gathering data by watching and listening to interactions. The researcher was able to observe reality as it develops and record what she heard and saw, giving her a thorough understanding of the situation and the participants.

1.11.7 Measures of Instruments' Trustworthiness and Piloting

The instruments were first subjected to a pilot test before use. The instruments for observation and the questions for semi-structured interviews were tested in a primary school not included in the final study. This school was chosen for various reasons including ease of reach. As I was teaching at the school, the existing relationships I had with the teachers and the learners could create a smooth and a relaxed atmosphere for the exercise. The researcher used a focus group and an individual interview to check the appropriateness of the interview questions and to assess how the questions were understood by the study participants. In doing this, the researcher was able to consider any revisions and make modifications where necessary.

1.11.8 Data Collection Procedures

The principals of the two schools were first notified in writing of the planned study and asked for permission to use the school as a middleman between the researcher and the teacher. The data was then collected through semi-structured interviews and lesson observations. Each research tool was used to answer the research questions in this study to achieve the main purpose of the study. The purpose of semi-structured interview is to give the researcher the opportunity to plan the procedure by creating questions that are pertinent to the study. The interviews lasted 20 to 30 minutes, and the probing questions helped to unravel the rich data needed for the study. The researcher was able to observe and take note of the important aspects of the interaction. Based on the study's objectives, the researcher also developed a brief checklist for classroom observation.

1.11.9 Data Analysis Procedures

In this study, thematic analysis was used to examine the data. The researcher used a digital audio recorder to take notes while conducting the interviews. To ensure accurate interpretations, the audiotape was played several times during the interpretation process. The researcher became familiar with the data, create initial codes, look for themes, review themes, define and name themes, and produce reports. After the transcriptions, the researcher read the data line by line to comprehend and become familiar with it to identify codes.

1.12 ETHICAL CONSIDERATIONS

To cover issues relating to gaining entry, participants' rights, informed consent, confidentiality, protection from harm, achieving anonymity, maintaining privacy, and ensuring ethical standards throughout the research process, comprehensive protocols were established and strictly adhered to.

The researcher presented the research proposal to the University of the Free State's Faculty of Education Research Ethics Committee for approval before beginning the study (Appendix A). The researcher asked permission from the Gauteng Department of Education (GDE) to conduct the study at two schools in Gauteng (Appendix B). The school principals (Appendix C) and teachers involved (Appendix D) were formally requested and engaged with regard to this research study's conduct. The research procedure was explained to each participant in this study to make sure that the participant-researcher relationship was solidified and transparent.

With the involvement of people in the research process, ethics plays a significant role in educational research. From a moral standpoint, McMillan and Schumacher (2019) confirm that ethics is concerned with beliefs about what is right or wrong when engaging with the participant. To protect the participants' rights and dignity, it is essential to abide by ethical principles. Several components of ethics were involved, including full disclosure, voluntary participation, and informed consent.

1.12.1 Informed Consent and Voluntary Participation

Following the granting of permission by the UFS and the GDE, the process of consulting potential participants started it was necessary to go over with them all their

rights as potential participants. Those who felt it was appropriate to participate signed a consent form (Appendix E) that ensures the confidentiality and security of the information provided. The rights of participants to voluntarily participate and withdraw was disclosed and guaranteed.

1.12.2 Anonymity and Confidentiality

Throughout the interview, privacy and confidentiality were respected. The researcher maintained the confidentiality of the recordings and notes. Instead of participants' names, codes were used ensures that no one reading the research report would be able to connect the response to a particular participant. This guarantees that the participants' private data stayed anonymous.

1.13 ORGANISATION OF CHAPTERS

Chapter 1 provides an overview of the study, outlining the research problem, objectives, significance, and the context within which the study is conducted. It sets the stage for the research by introducing the key concepts and background information necessary to understand the investigation.

Chapter 2 examines existing literature related to the study's focus, identifying gaps and establishing the theoretical framework that will guide the research. This chapter integrates relevant theories and previous research findings to provide a solid foundation for the current study.

Chapter 3 details the research design, methods, and procedures used to conduct the study, including the selection of participants, data collection techniques, and analysis strategies. It also addresses ethical considerations and the rationale for choosing specific methodological approaches.

Chapter 4 presents the data collected during the research and provides an analysis of the findings. This chapter includes a detailed examination of the results, using appropriate tools and techniques to interpret the data in the context of the research questions.

Chapter 5 summarises the key findings of the study, draws conclusions based on the analysis, and offers recommendations for practice, policy, or further research. It

reflects on the implications of the study's results and suggests potential areas for future investigation.

1.14 CHAPTER SUMMARY

This chapter provides background information and an introduction to the study on how Grade 1 teachers teach reading to Deaf learners. It was followed by the problem statement and rationale for the study. The parts that followed included the aims, objectives, and research questions. The scope and significance of the study followed. Operational concepts, such as deaf, reading and inclusive education were defined. The preliminary literature review and the conceptual and theoretical framework were discussed in Section 1.10. Section 1.11 addressed the research design and methodology, whereas Section 1.12 addressed ethical considerations. The next chapter presents a detailed literature review.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

According to Rudestam and Newton (2020:118), a literature review is “a piece of academic writing demonstrating knowledge and understanding of the academic literature on a specific topic placed in context”. Thus, a literature review is essential in research because it interprets existing literature, identifies dialects of contradictions between various ideas, and aids in calculating the impact of new information. In order to understand and research how Deaf learners’ gain reading skills, it was important to review the recent literature published concerning this topic. The study’s background, research question, objectives, and significance were briefly discussed in the previous chapter’s introduction. This chapter aims to provide an overview of the findings of other researchers on teachers’ experiences with teaching reading to Deaf learners in special schools.

Four themes are explored within this literature review. The first theme focuses on the reading development of Deaf learners. The second theme focuses on how Grade 1 teachers teach reading to Deaf learners. The third theme focuses on strategies that have been used with Deaf learners in order to increase their literacy skills, especially in the area of reading. Multiple different strategies have been tested in classrooms with Deaf learners with the goal of increasing their reading skills to a level comparative with their hearing peers. Furthermore, some of those strategies resulted in successful improvement of reading, where others showed no difference in the learner’s skills after the intervention time frames. The fourth theme identifies different challenges that affect reading of Deaf learners. Since vocabulary knowledge and phonology play significant roles in reading, it is important to explore the specific effects these two things have on reading. The discussion on this chapter leads to the understanding of how Grade 1 teachers teach reading to Deaf learners in special schools.

2.2 READING DEVELOPMENT OF DEAF LEARNERS

Reading is a cognitive skill, developed as the result of the interaction between the nervous system and cultural experience (Cohen, 2019). “Reading is the ability to understand and use those written language forms required by society and or valued by the individual. Readers can construct meaning from texts in a variety of forms. They

read to learn, to participate in communities of readers in school and everyday life, for enjoyment” (Mullis & Martin, 2015:312).

Development of reading skill in Deaf learners without age-appropriate spoken language skills is difficult and slow (Musselman, 2020). Moreover, access to auditory information leads to the use of the letter-to-sound correspondences and provides a basis for phonological decoding. Deaf learners have problems with fundamental skills such as phonology and decoding that will affect word recognition (Kyle & Harris, 2021) as well as language skills such as syntax and grammar that influence sentence comprehension.

Regular assessment of reading skills, especially for Deaf learners, is crucial as many lag behind normal-hearing learners (van Staden, 2023). Identifying reading difficulties and implementing effective support strategies is essential. As learners grow older, reading becomes more important, impacting their educational attainment and future occupational status (Walter & Dirmeyer, 2023).

Education of Deaf learners has always included various approaches to the appropriate teaching methods; however, teachers are more contented with the oral or verbal method and SL than other methods (Alpiner & Mc Carthy, 2022). While some experts focus on using SL, the proponents of oral or verbal method use the residual-hearing ability and lip reading in teaching Deaf learners.

Higher educational pursuits and fruitful employment are said to be the results of hard work, determination, and intellectual acumen (Davis, 2019). During the formative years, significant emphasis is placed on the mastery of written and spoken English, as intelligence is strongly rooted in literacy (Godley & Escher, 2021). There is an abundance of literature regarding best practices to promote reading in hearing children; however, research exploring this topic with Deaf learners is scarce.

Deaf learners have substantially lower reading levels than their hearing counterparts in math and English, regardless of ongoing unsubstantiated pedagogical reformations (Amod, Heafield and Seabi, 2020). In their expansive review of the evidence-based practices in deaf education, (Amod, Heafield and Seabi, 2020) researched the reliability and validity of the implemented practices. They found limited empirical support for many of the practices used in deaf education.

Studies indicate that Deaf learners who learn sign language early in life show better reading skills. Despite advancements in hearing aid technology and medical management, Deaf learners still have variable reading outcomes, particularly in phonological awareness and language abilities, and a significant risk for poor reading outcomes (Nitttrouer 2019).

The critical language acquisition window closes after age 3, and a strong foundation is crucial for a child's future language abilities, especially for Deaf learners (Allen, 2022). Early access to Sign Language (SL) expands vocabulary and bridges concepts to meaning.

The available literature has revealed much controversy on the effects of inclusive education on reading development of Deaf learners. Opponents of inclusive education which includes the international policy initiatives, argue that the academic achievement of Deaf learners is significantly behind that of hearing learners (Alasim, 2019). They asserted that Deaf learners may not perform better in inclusive classrooms, due to several factors, such as learners receiving less attention from their teacher. In addition, the teacher may not understand the characteristics of hearing loss as well as the special classroom teacher, who is a specialist in the education of Deaf learners. On the contrary, the majority of inclusive education supporters have asserted that classroom interaction and instruction in inclusive education classrooms can assist Deaf learners to improve their academic achievement.

According to Mayer (2021), between the ages of 4 and 7, learners go from emergent literacy, a term used to describe a child's knowledge of reading and writing prior to formal instruction, to conventional literacy or knowledge gained from formal instruction. It is during this period that Deaf learners begin to demonstrate below average reading and writing abilities.

Deaf and hearing education disparities stem from factors like cognitive decline, language barriers, social isolation, lack of qualified teachers, and communication methods (Streng, 2019). Despite progress, there's a lack of research on integrating Deaf culture into educational interventions.

2.3 TEACHING READING TO DEAF LEARNERS

Learning to read at age-appropriate levels is a problem for many, but not all, learners who are born deaf. Regardless of whether they speak or sign, the median reading level of Deaf learners indicates subpar achievement. Approximately 10% of Deaf learners read beyond an eighth-grade level (Txaler, 2020). This statistic indicates that there are many skilled readers in the Deaf population. The challenge is to discover what factors distinguish them from unskilled readers (Belanger & Baum, 2022). Only then can effective diagnostic and educational programmes be devised to ameliorate the problem. Moreover, understanding the nature of proficient reading in learners who are deaf promises to elucidate theoretical models of reading development.

Like their hearing counterparts, Deaf learners who are learning to read enjoy having the same story read over and over to them. Trelease (2013: 71) explains

this is a natural and necessary part of language development: “These re-readings coincide with the way children learn. The repetition improves their vocabulary, sequencing, and memory skills. Research shows that pre-schoolers often ask many questions (and sometimes the same questions) after a dozen readings of the same book, because they are learning language in increments – not all at once. Each reading often brings an inch or two of meaning to the story. Deaf readers extend the text liberally the first time they read a story, but each successive reading of the book has less and less elaboration. The signing comes closer and closer to the actual text. The same approach is used by teachers in a process known as shared reading, where the same story is read and re-read in the classroom with a slightly different focus each time to help beginning readers learn about printed text.

There are certain basic conditions which must be met in order to establish the most favourable environment for teaching the Deaf child to read. The significance of oral language for learning to read which has been highlighted by psycholinguistic theory is as valid for the Deaf as for the hearing child (Marschark, 2019) However, the understanding vocabulary of several thousand words and the unconscious grasp of the syntactic features of English which we expect to be present in most native-

speaking first-graders, cannot be taken for granted with the Deaf learner. While experiences to increase vocabulary are a part of all reading programmes, they are at the very heart of reading programmes for the Deaf. As Streng (2019) observes, language is the primary concern in teaching Deaf children to read.

Deaf learners need a visual environment to thrive. According to Jalinus, Sukardi, Wulansari, Heong and Kiong (2023), a helpful activity which might help Deaf learners includes learners labelling items in the classroom such as doors, desks, chairs and charts with a label that has the written word on it.

Deafness is not just a loss of hearing, but a complex issue with unique problems. Most deaf individuals have never heard English, and their communication language is SASL. They may require speechreading, hearing aids, interpreter services, and differentiate between speech and background noise to meet their hearing needs (Baum, 2022).

Kerry (2023) argues that hearing impairments are often identified in babies, but they may not develop or make themselves known for several years. This means that it is important to keep an eye out for the signs of hearing impairment in the classroom, particularly in young learners. A learner whose hearing impairment negatively affects their learning is likely to withdraw further into themselves throughout their education, which has a knock-on effect throughout the rest of their life. The frustration of being unable to express themselves and communicate both inwardly and outwardly is highly damaging and can impact their relationships with others.

Staden (2023) contends that a Deaf learner does not necessarily require constant additional help but rather a mindful and sensitive approach to teaching the whole class not facing the whiteboard to speak, minimising background noise and using visual aids as much as possible. Furthermore, dedicated staff for schools that have the budget to employ one, such as a communication support worker or learning support assistant can provide hugely valuable help. Whether in the classroom all or some of the time, they can ensure the learner is supported while the teacher is able to give proportionate attention to other learners.

More recent studies demonstrate that Deaf learners learn best through explicit and direct instruction rather than through incidental exposure (Cannon & Fredrick, 2020). It is vital that Deaf learners are given the right support from as early a stage as possible. If a teacher has a Deaf learner in their class, teaching in a way that fully supports them may seem a daunting prospect, but there is plenty of support and many ideas available (Connor, 2019).

Various educators have explained the methods of teaching reading in various ways. McGuinness (2020) highlights that methods of teaching reading to include

- the phonic methods (methods that use the phonemes);
- syllabic methods (that use the vowels and consonants);
- eclectic methods (which combine of all the methods); and
- look and say or look and sign methods (methods that include the whole word, whole sentence, whole story, and whole picture; these methods demand for the teaching in wholes, that is to say no to breaking up words in syllables or phonemes or to the teaching of stories in parts).

During the teaching/learning processes, teachers have to gauge and make tough decisions regarding content, method, space/setting, timing and resources (Davis, 2019). This is equally critical for teaching Deaf learners. Good and Schleper (2017) state that if a teacher does not know how to look, they will not see much. Teachers of Deaf learners need to know how to look (observe for this case) because any language used for Deaf learners is visual in nature. Byrne (2018) pointed out the importance of a teacher getting attention of the learner who is deaf, make sure the speaker's face is visible to the learner by avoiding covering the mouth or chewing while teaching, avoiding walking around the classroom or turning towards the board while giving instructions since learner who are deaf have difficulty following conversations that move around the room.

2.4 CHALLENGES OF TEACHING READING TO DEAF LEARNERS

A number of scholars have conducted studies regarding the challenges that teachers encounter while teaching Deaf learners to read; some of which this study highlights.

This study highlights the challenges faced by teachers teaching Deaf learners to read, including difficulties in phonemic awareness, vocabulary, syntax, prior knowledge, and metacognitive skills. Deaf learners often struggle with both low-level and high-level reading skills, and effective instructional reading programs should address skills such as word identification, word knowledge, and comprehension (Kelly, 2021).

Marschark (2019), however, claimed that there was much that was not known about the Deaf learners' reading. To him, the lack of progress in promoting Deaf learners' reading achievement was largely the cause of the wrong directions taken. He strongly believed that the challenges in educating learners who are deaf usually ascribed to reading were not literacy-related at all. He observed that learners who were deaf made the same kind of mistakes in reading and writing as those made by people learning English as a second language. This observation was, however, of learners of a higher grade. It remains to be investigated whether the same pattern would be applicable to the learners who are deaf and are at the primary school level.

Eisenbraun (2021) noted that Deaf learners used many communication approaches, and this had instructional implications. Some of these learners unfortunately were in classes where the teachers did not know SL, and an SL interpreter had to be brought into the classes to provide SL interpretation. Berke (2018) also observed that there is no consensus among researchers, educators, parents, or those who are deaf or hard of hearing about the best reading strategies for learners who are deaf or hard of hearing. Chamberlain (2019) argued that reading development is contingent on a fully developed primary language, and that incomplete or inconsistent signed or spoken language may affect the development of reading proficiency.

Luckner (2017) notes that Deaf learners have significant difficulties in comprehending written text. This is mainly due to the hearing loss that prevents them from being exposed to oral language when they were an infant. However, it is also due to the type of educational intervention they are faced with, which accustoms them to decoding single words and isolated sentences, rather than entire texts.

Vocabulary and phonology have always been sources of difficulty for Deaf learners'. In regard to their reading skills, vocabulary and phonology tend to be two areas that contribute to the lack of comprehension when Deaf learners are reading. Devers and

Frankel (2000) report that some studies have indicated a strong correlation between vocabulary knowledge and reading comprehension in Deaf learners. An additional challenge for Deaf learners is the way they learn vocabulary. Wauters and Van Bon (2019:49) state that “Reading words that are thought to be learned linguistically takes longer than reading words that are thought to be learned through perception”. Since Deaf learners tend to learn their words visually (through perception), it makes the task of acquiring vocabulary extremely difficult for them. In regard to phonology, Miller (2020:17) states: “Factors considered central for explaining the reading process in hearing readers –such as phonemic awareness and phonological coding – have also been targeted in attempts to illuminate the origins of the impoverished reading skills of Deaf learners”.

According to Kunisue (2017:228), “The ability to comprehend abstract words and ideas are essential in the development of academic language skills Deaf learners”. Abstract, multi-meaning words and figurative language are especially difficult for Deaf learners. This theory is supported by Aceti and Wang (2020) who stated that most vocabulary deficiency in Deaf learners comes from their limited access to multi-meaning words. Typically, this lack of vocabulary is considered by many educators to be at least part of the problem when it comes to the comprehension of sentences or passages read by Deaf learners’ (Kunisue, 2017).

Giang and Inho (2018) state that one possible reason for the persistence of the reading deficits of Deaf learners is a dearth of knowledge of the world; another is insufficient development of metacognitive skills (e.g., the ability to infer information that is not explicitly stated in a text or the ability to understand figurative language). This study by Giang and Inho (2018) indicates yet another area of language that Deaf learners struggle with, in addition to abstract words and multi-meaning words. Based on the literature, vocabulary (sight words, abstract words, multi-meaning words, and figurative language) is definitely an area that impacts the reading skill for Deaf learners (Kelly, 2021).

2.5 STRATEGIES TO SUPPORT THE DEVELOPMENT OF READING TO DEAF LEARNERS

This section highlights some of the approaches and methods that can be developed for teaching reading. The earlier approaches included the use of SL, total communication and bilingualism. Teaching strategies are the methods, techniques, procedures and processes that a teacher uses during instruction (Hattie, 2019). It is generally recognised that teaching strategies are multidimensional, and their effectiveness depends on the context in which they are applied.

The teaching of reading to Deaf learners is constantly being transformed through the increased interest and several studies carried out on the subject. Crotty (1998) observed that the Deaf use an alternative pathway, specific to reading, not used by people who hear. It will, however, be noted that reading to Deaf learners (an approach that has its base in the bi-lingual approaches) has been observed to be instrumental in the teaching of reading to the deaf. The belief is that the simple, most important activities for building the knowledge required for eventual success is reading aloud to children (Schleper, 2016). The methodology includes several specific tasks for the reader to observe: The Deaf reader translates stories, maintains both languages, and is not constrained by the text. They re-read stories or engage in continuous storytelling; follow the child's lead; make implicit content explicit; adjust signing style to match the story; connect story concepts to reading; employ strategies to maintain attention; use eye gaze to encourage participation; engage in role play to extend concepts; vary the signing of repetitive English phrases; create a positive and reinforcing environment; and expect the child to become literate. (Harris & Beech, 2020). However, it is challenging as some learners could be profoundly deaf.

Other modern variations include fingerspelling which relies on the use of the Manual Alphabet. Some allow signing (a basic ingredient of SL) as an auxiliary mode (commonly learned as the sign-supported approaches) while others engage the pure oral approaches which forbid the use of any manual communication (Schleper, 2016). In such cases cochlear implants are used as an integral part of the oral-based programme. The use of phonics (that has its roots in oralism); one other approach focuses on hearing to parent connections between sounds and the words and understand how it looks like when written. Alternatively, one would use the whole

language approach that focuses on seeing the learner learn to read first, followed by how to say and spell the words.

Puente, Alvarado and Valmaseda (2019) observed that the teaching/learning methodologies for teaching the Deaf first engaged the oral and written bilingualism. These modes were characterised by attributes such as signed speech which was used to complement and reinforce spoken communication, fingerspelling used as a support strategy in reading, SL and cued speech. Gates and Chase (2019) observed that the Deaf learn spelling by use and perception of visual forms. Likewise, the teachers could use the manipulative visual language tool, to help children visualise sounds they cannot hear (Berke, 2018). It naturally follows that guided reading for the Deaf and hard-of-hearing children, would be highly dependent upon the effectiveness of the teacher/teaching processes.

Multiple different strategies have been tested in classrooms with Deaf learners with the goal of increasing their reading skills to a level comparative with their hearing peers. In other words, it is the duty of educators of the Deaf to identify their learners' needs and explore strategies to help them improve their reading skills. In agreement, Dimling (2020:469) states that "intense, targeted interventions that use evidence-based approaches are imperative for learners with a disability such as hearing loss to minimise its impact and maximise language development". These concepts are all good reasons to regard the research of reading strategies that can support Deaf learners as extremely important for educators. Miller (2019:21) conducted research regarding reading comprehension and its relation to the amount of functional deaf learner may have, and when his finding did not confirm his hypothesis, he stated that "focusing on reading strategies of individuals with hearing loss may be a more fruitful approach to understanding the underlying causes of their reading problem".

Dimling (2020) investigated a non-visual reading strategy to help Deaf learners improve their reading skills through a vocabulary intervention. For six to eight weeks, six learners took part in a 30-minute intervention to determine what effects vocabulary intervention would have on word recognition, production, and comprehension. Each week, the learners learned 12 new vocabulary words using three components: word introduction, word activities and practice. Dimling (2020:465) described her findings as follows: "The results of the present study suggest that a vocabulary intervention

grounded in conceptual emphasis can substantially and positively affect learners' vocabulary knowledge". This study suggests that vocabulary has an impact on reading comprehension for deaf people. While Daza and Lopez (2018) did not do their research on an intervention strategy, the findings from their study support Dimling's findings. Their study investigated the language skills (including vocabulary) and reading comprehension in Deaf learners. They stated that vocabulary knowledge may be notably significant in the area of developing reading skill. Based on both studies, we can conclude that vocabulary plays a vital role in the reading skills of Deaf learners.

Van Staden (2023) took a different approach when researching the strategies that can be used to support reading to Deaf learners. She investigated the use of a balanced literacy approach with the addition of multi-sensory coding strategies as well as reading scaffolding to increase the reading skills in a group of 64 Deaf learners ranging in age 6 to 11. The group was split at random and while one group received regular classroom instruction, the other group received the intervention strategies. Pre-intervention, there were no major differences in the groups' scores on the nine assessments that were administered. The intervention was conducted over a period of nine months and the post-intervention results showed that there was a large increase in reading and vocabulary skills of the Deaf learners who participated in the balanced reading approach intervention. In comparison, the group of learners who received usual classroom instruction did not exhibit the same kind of gains in their reading and vocabulary skills (van Staden, 2023). These results indicate a positive correlation between the intervention and the reading skills of the Deaf learners involved in the intervention. Van Staden (2023:179) states "The results show that following a nine-month intervention of balanced reading instruction techniques, profoundly deaf-signing foundation-phase learners had demonstrated a significant improvement in reading when compared to a control group who received the usual classroom instruction" and "the findings demonstrate that the benefits of following a whole language approach embedded in bilingualism only were marginal for the control group". These results indicate that in order to support Deaf learners in reading and comprehension, a balanced literacy approach should be embraced in the classrooms.

The teacher's role is to assist the learners in developing fluency, confidence and insights into themes, styles, divergent opinions, and various forms of literature; while

invoking their responses based on their own thoughts, feelings and opinions about the reading process. The teachers have to engage in guiding the learners to discuss and explore the reading process, so that the learners can develop literacy skills which they could later apply to what they learn; when they read and write independently (Laurent Clerk National Deaf Education Centre, 2021).

2.6 THEORETICAL FRAMEWORK

A theoretical framework in a research study, according to Omirin and Falola (2021), is the framework that supports and directs a study's theory. In other words, a theoretical framework creates a broad explanation for a certain phenomenon. In a similar way, Swart and Pettipher (2021) define a theoretical framework as a collection of ideas that are logically arranged to help us understand the world and ourselves. The social constructivism theoretical framework was applied in this study. Lev Vygotsky first proposed the social constructivism theory of learning in 1968. According to the theory, language and culture serve as the frameworks through which people interact with one another, perceive their surroundings, and comprehend it. Language and culture, in Vygotsky's view, are crucial to both the intellectual growth of people and how they view the world.

This means that concepts are transmitted through language and understood through experience and interactions in a cultural context. Knowledge is not just socially constructed; it is also jointly constructed because it takes a group of people to have a shared language and cultural heritage. The connection here is that, whereas the constructivist views knowledge as something learners independently construct based on the experiences they gather from their environment, the social constructivist views knowledge as something learners collaborate on with peers, teachers, and other students.

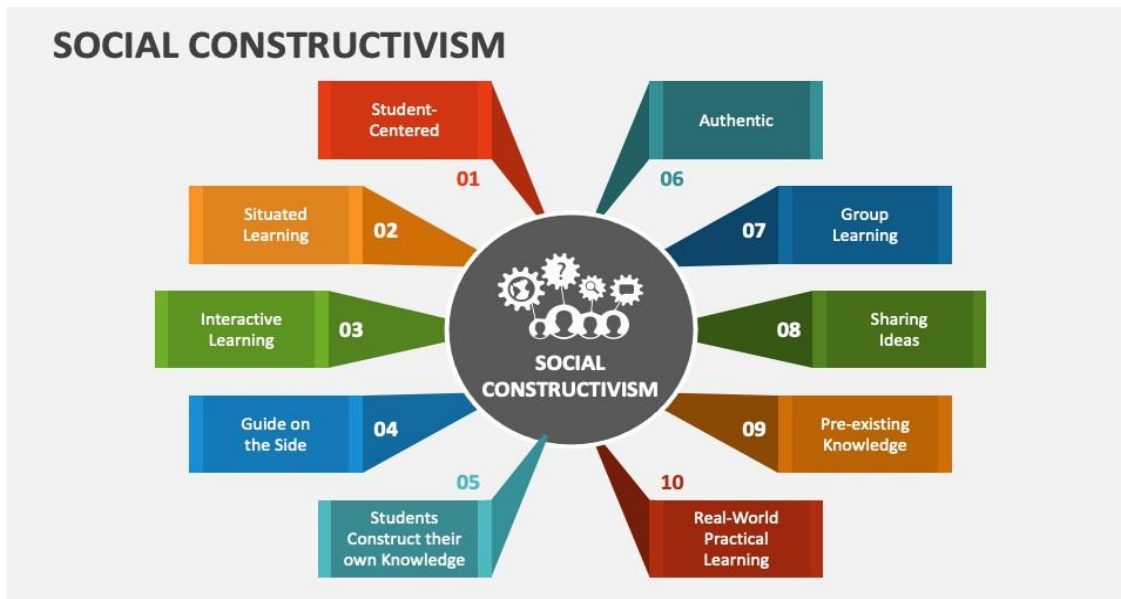
According to Vygotsky (1968), social learning promotes cognitive development throughout one's lifetime. In other words, learners can complete any learning task, no matter how challenging, with the help of an adult or a group of their peers. This theory supports the development of opportunities for learner's collaboration with the instructor and peers in the creation of knowledge and understanding. Kapur (2018) noted that the social construction of knowledge occurs in a variety of contexts and ways.

It could be accomplished through group discussions, teamwork, or any type of educational interaction in a place of worship, on social media, or in the marketplace. Students gain the knowledge and experience necessary for leading fulfilling lives as they engage with others and their surroundings, both material and immaterial.

In social constructivism, human interests are important for research purposes and knowledge is constructed through social interaction. Such knowledge is shared rather than an individual experience (Gergen, 2019). According to Leigh (2020), constructivism implies that reality is constructed through human interaction, and knowledge is a human product and is socially and culturally constructed. Individuals create meaning through their interactions with each other and with the environment in which they live. Social constructivism emphasises the importance of culture and context in the process of knowledge construction and accumulation. Social constructivism strongly impacts the way in which people learn. Learners add to and reshape their mental models of reality through social collaboration, building new understandings as they actively engage in learning experiences (Khalifa, 2019). In addition, scaffolding, i.e. guidance and support, plays an important role in the learning process.

The fundamental art that directs the management and delivery of lessons in the classroom can also be said to be teaching methods. In order to encourage learning in the students, Dorgu (2015) defines teaching method as the strategy by which a teacher communicates their subject matter to the learner in accordance with predetermined instructional objectives. According to Westwood (2018), a teaching method is made up of the guidelines and techniques that instructors employ to promote student learning. These definitions make clear that there are rules and procedures for teaching that are designed to maximise students' learning. These guidelines and procedures are based on learning theories like social constructivism.

Figure 2.1: Lev Vygotsky values of social constructivism



Source: Lohman (2023:43)

To understand Vygotsky's work, two key principles must be understood: the MKO and the ZPD. The MKO is self-explanatory; it refers to someone who understands or has a higher ability level than the learner in relation to a specific task, process or concept. Although the implication is that the MKO is a teacher or an older person, this is not always true. Many times, a child's peers or an adult's children will have more knowledge or experience. The key to MKOs is that they must have (or be programmed with) more knowledge about the topic being learned than the learner. The concept of the MKO is inextricably linked to Vygotsky's second major principle, the ZPD. The MKO and ZPD, when combined, form the foundation of the scaffolding component of the cognitive apprenticeship model of instruction. This study, however, will concentrate on the ZPD.

The ZPD is defined by Vygotsky (1978:89) as the difference between "actual developmental level as determined by independent problem-solving and potential developmental level as determined by problem-solving under adult guidance or in collaboration with more capable peers". Vygotsky believed that when a student arrived at the ZPD for a specific task, providing the necessary assistance (scaffolding) would provide the student with enough of a "boost" to complete the task. Once the student

has mastered the task while using scaffolding, the scaffolding can be removed, and the student will be able to complete the task on his own.

Vygotsky's ZPD concept appeared to focus more on interactions involving schooling and academic learning. His point of view appears to be that the ideal role of the teacher is to provide scaffolding as a means of assisting learners on tasks within their zone of proximal development. When a learner cannot accomplish a given task, but that task is within the learner's ZPD, using the right tools and appropriate assistance the learner may be able to accomplish the task. This assistance is also known as scaffolding. Scaffolding is a temporary support that parents or teachers can give to a child to assist them to accomplish the task. After mastering the task, scaffolding will be gradually removed, and the learner will be able to complete the task on their own.

In addition to believing that human development is the result of interaction between people and their environment, Vygotsky (1978) added that these interactions are not limited to people but also to mediation tools or artefacts such as language and teaching material (various signs and symbols). According to Feuerstein, Falik and Feuerstein (2023), mediation can help to modify a child's cognitive development. According to Wertsch (2017), mediation is a central theme in Vygotsky's writings. Mediation is related to significant people in the learner's life (Vygotsky, 1978). They are people who can choose, organise and present the information and/or tasks that they believe are most appropriate for the child in order to move the child forward (Gage & Berliner, 2018).

The mediator in this study is a special needs education teacher who uses tools such as language and teaching material to assist the child in discovering and learning. The teacher's interactions with students form the foundation of the entire mediation process. It is critical to consider the following: Interaction between teacher and learner, as well as the presentation of teaching materials by the teacher, serve as mediation tools. The teacher stands between the learner and the learning material. As a result, being a mediator will depend on how a teacher integrates their students' prior knowledge and the teaching material so that the students can acquire new knowledge.

Daniels (2022) and Thompson (2019a & b) identify the following forms of mediation that influence progress within a ZPD:

- 1 Direct guidance from a teacher or a more capable peer. The instructive voice, while initially didactic, can be internalised by the learner as part of their own inner speech.
- 2 Expert modelling of a behaviour or task that the learner initially imitates and then internalises and appropriates.
- 3 Oral or written feedback that provides performance guidance.

The ZPD which emphasises the importance of the teacher in a student's learning, is one of the central ideas of Vygotsky's theory of social constructivism. The ZPD specifies which activities a student can complete on their own and which they must complete with an instructor's assistance. According to the ZPD, learners are able to comprehend and master knowledge and skills with the aid of a teacher that they would not be able to do on their own (Schreiber & Valle, 2021). Learners can complete a task independently once they have mastered it. According to this theory, the teacher is not merely a passive figure for the learners to learn from; rather, they play a crucial part in their knowledge acquisition.

2.7 CHAPTER SUMMARY

The results of the literature study show that Deaf learners have experienced reading challenges and that various interventions designed to address these challenges have existed for a long time. Building inclusive educational facilities that accommodate Deaf learners alongside those without challenges is a strong global trend. The literature on Deaf learners in South Africa also describes how the government has tried to address the many difficulties presented by Deaf learners by establishing special education schools. The literature has, however, shown that there are no quick fixes or simple answers to these problems. Finding practical, context-appropriate solutions in this field calls for ongoing research and consistent approaches.

The study's methodology and research design are covered in the following chapter. This includes the research method, sampling, research instruments, data collection process, trustworthiness, ethical considerations, and the study's limitations.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This research explored the approaches and methods of teaching used by foundation phase teachers when teaching reading to Deaf learners in special schools.

In this chapter, I thus provide the research design and methodology that I used to conduct this research study. The study employed the qualitative method to answer to the research question. The intention was to study the phenomenon in a natural setting to get rich data. This was to get as much information from the teachers as possible. Patton (2020) asserts that the qualitative approach provides a chance to get close enough to the people and the circumstances to capture what is happening. In addition, I also discuss the sampling process or method used in this study. In doing this, I start with the profile of the participants and my position as a researcher. Importantly, ethical and validation issues are considered in this chapter. Furthermore, data generation procedures are described. These were semi-structured interviews and classroom observations.

3.2 RESEARCH PARADIGM

A research paradigm is a set of shared assumptions and a strategy for approaching research problems (Anand, Larson, and Mahoney, 2020). According to the author, a paradigm is an overarching assumption and viewpoint that guides all other research and development in a given area of study. A research paradigm is a way of thinking that establishes the scope and methods of research. Since a clear paradigmatic stance helps guide our design decisions and justifies these decisions, Maxwell (2022) argues that as researchers we need to be explicit about which paradigm or paradigms our work is drawing on. Instead of having to create their paradigm for research, using an established one enables a researcher to build on a logical and well-developed approach.

The interpretative study paradigm, chosen for this study, focuses on individual understanding and social behavior. It acknowledges the complexity of the world and social constructions like language and consciousness as the only way to access reality (Cohen, Manion and Morrison, 2021). Interpretivism is subjective due to the senses'

role in interpreting reality and the researcher's background and worldview (Grix 2020:175).

Additionally, this paradigm enables the researcher to gain access to participants' perspectives and real meanings of social phenomena (Neuman, 2021). With this perspective in mind, the interpretive paradigm is appropriate to this study because the participants teach in a specific setting and draw on a variety of approaches based on their personal experiences and beliefs about how to best teach reading to Deaf learners in special schools. In interpretivism, there are variations in impartial reality rather than a single one. Therefore, interpretivism has given the researcher a framework for investigating how teachers teach reading to Deaf learners in special schools.

Tuli (2020) focuses on a few benefits of this paradigm. The first benefit is that interpretivist researchers can better understand phenomena in their social context by using a variety of perspectives to examine phenomena. Additionally, researchers can carry out these kinds of study in a natural environment by using important methodologies like grounded theory, ethnography, case studies, or life histories to get an inside look at the research participants' world. Wellington (2017) adds that another benefit of this paradigm is that interpretivism enables investigators to probe subjects' beliefs, values, prejudices, perceptions, views, feelings and perspectives. As a result, the useful information gathered gives researcher's better insights for subsequent action.

The study, which is supported by interpretivist beliefs, has been criticised for its lack of generalisability and subjective nature. According to Cohen et al. (2021), interpretivists are more concerned with comprehending complicated events within their contexts than with using scientific methods to establish the veracity of discoveries. Mark (2020) contends that interpretivism's ontological perspective is frequently subjective, resulting in prejudice due to the researcher's interpretation or cultural preference.

The strongest argument in favour of an interpretive study, according to Wahyuni (2022), is that the data collection and analysis are greatly influenced by both the researcher and the study subjects. Data has been gathered for this study from the participants' classrooms and schools. Thus, the interpretivist strategy concentrated on various teachers and their varied experiences in LSEN schools. In the section below, I present the theoretical methodology that guided this study. A paradigm is strengthened by its theoretical methodology and research methods.

3.3 RESEARCH APPROACH

Cope (2021:27) defines research design as “the framework of research methods and techniques selected by a researcher to conduct a study”. To ensure the success of their studies, the design enables researchers to fine-tune research techniques appropriate for the field. The purpose of a research approach is to make sure that the information you gather enables you to approach the research problem as logically and unambiguously as possible.

The qualitative research methodology was appropriate for this study. A qualitative approach is an investigation that seeks to explore and comprehend a phenomenon through a detailed, holistic picture, analyses words, presents informants' perspectives in-depth and conducts interviews with a variety of people (Creswell & Clarke, 2017). According to Holliday (2018), qualitative research distinguishes between activities taking place in a particular setting as opposed to manipulating variables. It is a method that makes it possible to respond to the research questions by painting a full picture of the actual circumstances surrounding teachers' classrooms where there are learners with learning challenges.

The qualitative approach assisted in finding out how the four teachers reflected on the ways they taught reading to Deaf learners and their experiences in the process. It was strongly felt that methods of teaching reading could adequately be expressed in words rather than in any form of quantification. The four teachers expressed their perceptions of teaching reading in special school employing words hence a qualitative approach was used. The qualitative approach enabled the unearthing of teaching methods that were perceived to be important in teaching reading as perceived and experienced by the teachers. The participants gave their own reflections which is one of the strengths

of the qualitative approach. Therefore, the participants presented their emic views of Deaf learners with reading problems while empathizing within the process.

The primary benefit of using a qualitative approach is that it enables the researcher to gain a comprehensive understanding of events as they happen (Cohen, 2021). According to Sekaran and Bougie (2023), qualitative research typically produces more creative findings than other types of inquiry. The qualitative methodology aids the researcher in developing a deeper comprehension of teachers' management techniques in real-world situations. In order to produce rich narrative descriptions and build case studies, Patton (2020:28) claims that "qualitative researchers engage in naturalistic inquiry, studying real-world settings inductively".

Qualitative research's focal point is on how each participant views and understands their context and circumstances which facilitate meaning construction based on experiences. Qualitative research maintains researchers receive elucidated explanations, catch sight, and interpret small parts of reality (Holliday, 2018). Participants are observed in their actual setting. Through interactions and observations, the qualitative research methodology allowed the researcher to observe the participants in their natural settings and focus on their meanings and interpretations. The researcher gained new insights into and perspectives of the participants' diverse perspectives on the challenges they faced and how they dealt with teaching reading to Deaf learners.

3.3.1 Study Location

The case study took place at two special educational needs schools which cater for deaf in the South African province of Gauteng. The name of the school will not be disclosed in order to maintain confidentiality and anonymity, as well as to protect the rights and welfare of the participating teachers. The schools accept and educate Deaf learners. The institutions serve learners from all races in South African society and are representative of average conditions or circumstances in special education centers. The region chosen for this study is one that is relatively simple to get to because it is the province where the researcher works.

3.3.2 Research Design

The study of data production using theoretically informed approaches is known as a research methodology. This includes the research design, methods, participants, data collection tools or instruments, interventions and procedures used in the study (McMillan & Schumacher, 2021). Jonker and Pennink (2020) go on to say that a research methodology is a theoretical decision that should support the research paradigm and the research methods employed in a study. As a result, the research paradigm, research methodology, and research methods must be all in line with one another in a study.

In this study phenomenological research design will be used. Phenomenological research is a qualitative research approach that seeks to understand and describe the universal essence of a phenomenon (Groenewald, 2020). In addition, the approach investigates the everyday experiences of human beings while suspending the researchers' preconceived assumptions about the phenomenon. In other words, phenomenological research studies lived experiences to gain deeper insights into how people understand those experiences.

The phenomenological research design will enable the researcher to understand a phenomenon's universal nature by exploring the views of those who have experienced it. By using this research design, the researcher will be able to explore teachers' experiences with the teaching of reading to Deaf learners in special schools.

3.3.3 The Population

In research, the population refers to the entire group of individuals, objects, or events that share a common characteristic and are the focus of the study. It represents the complete set of elements that the researcher aims to study and draw conclusions about (Jilcha Sileyew, 2020). The target population of the study comprised of grade 1 teachers. Teaching sign language in special schools in Gauteng province. The total number of teachers was four.

3.3.4 Sampling

Sampling is the systematic choice of a subset of participants whose characteristics are truly representative of the entire population under study (Morrow, 2023). The

participants in this study were chosen using purposive sampling. Therefore, the sample aims to provide the most comprehensive data possible, which helps to achieve the study's objectives (Pullman, 2018). This method is also used when one wants to study a portion of a larger population where the participants can be easily located and contacted but studying the entire population would be an impossible task. When one needs to study a particular cultural domain with knowledgeable experts inside, the purposive sampling technique is a type of non-probability sampling that works best (Haptonstall-Nykaza & Schick, 2020).

Bertram and Christiansen (2022) state that researchers must choose how many people, groups, or objects (like schools) have been observed. Furthermore, they claim that researchers who follow the interpretive and critical paradigms frequently do not care about statistical precision or the question of whether their data accurately represent the entire population. Green (2020) contends that researchers should be well-versed in data to take advantage of opportunities to enlarge and diversify the sample. Detailed and in-depth explanations, analyses, and descriptions are of particular interest to researchers. The participants in this study were Grade 1 teachers in the Gauteng West district and Johannesburg North District.

3.3.4.1 Criteria for choosing the participants

The four teachers were selected because they were assigned to teaching reading in Grade 1 at the schools. Also, they were suitable for the study due to the long experience they had of teaching reading. All teachers had taught the skills for some time. The goal of purposeful sampling is to find cases that are likely to be "information rich" concerning a phenomenon. The length of time the special needs education teachers had been working with learners was another factor in selecting the participants. It was determined for this study that the special needs teachers, who had worked with Deaf learners for many years were a good choice to respond to the research questions.

3.3.4.2 The sample

A group of people who share some traits that the researcher is interested in is referred to as the target group (Kahn, Ermer, Salovey, and Kiehl, 2021). The foundation phase special needs education teachers from two different schools made up the study's

target population. Four special needs teachers were chosen, with two teachers from each school in order to obtain rich information relevant to the research questions. The schools were chosen because they had teachers who had taught Deaf learners reading for a long time.

3.4 DATA GENERATION METHODS

According to Bertram and Christiansen (2019), data refers to the information that researchers used as evidence to determine the answers to the questions they are posing. The researcher can choose from a variety of data generation tools to produce data that is pertinent to the study. According to Creswell et al. (2016), methods are the instruments used by researchers to produce data, and these methods can be applied to any type of study. Researchers can collect information about social reality from people, groups, artefacts and texts in any medium through the tools. They add to this by stating that the methodology serves as a link between the researcher's paradigm constructivism and philosophical standpoint (ontology and epistemology).

The use of multiple methods (triangulation) to generate data increases validity and authenticity (Maxwell, 2022). For this study, two research instruments were used for data generation, namely, semi-structured interviews and lesson observations of the lesson taught. During this research process, observed lessons were video recorded. Each research tool was used to assist the researcher to respond to the research questions in this study and to understand the actual research situation to achieve the purpose of the study (Szterman & Friedmann, 2020).

3.4.1 Semi-Structured Interviews

According to Yin (2020), interviews are the method of collecting data from qualitative research that is most frequently used in case studies. A flexible method for gathering data, an interview enables the use of multi-sensory channels (Cohen, Manion & Morrison, 2019). To allow the collection of detailed information from the teachers about how they teach reading to Deaf learners in the two schools, the interview method was suitable. The interview is a verbal conversation between two people with the objective of collecting relevant information for the purpose of research (Bailey, Hennink & Hutter, 2021). It allows participants to speak out their opinions, feelings, beliefs, insights,

attitudes and experiences about a problem in question through the use of probing questions.

Interviews are the most common method used by researchers to gather data. Structured interviews, semi-structured interviews, and unstructured interviews are the three types of interviews that can be used when conducting research (Szterman & Friedmann, 2020). The most typical type of interview used in a qualitative study, according to Holloway and Wheeler (2020), is a semi-structured interview. They contend that in this kind of interview, pre-written questions are used, and the researcher is free to ask for clarification. Semi-structured interviews enable the researchers to give interviewers a clear set of instructions and to deliver real, comparable qualitative data, taking into account the necessity of the interviewer asking open-ended questions. Additionally, the interviewer was able to choose the wording of each question and the use of probes when conducting the interviews. Open-ended interview questions were used to elicit detailed information about the phenomenon. An interview guideline was developed for these interviews in order to collect similar types of data from the participants and to establish an order based on the data gathered. A conversation between the interviewer and the interviewee was encouraged during the interview, which has the benefit of fostering interaction and the growth of a relationship.

The teachers were interviewed individually. Çetin and Gündoğdu (2020) state that one-on-one interviews are valuable for obtaining detailed, rich data, exploring complex issues, and understanding the individual perspectives of participants. Moreover, Szterman and Friedmann (2020) argue that interviews are particularly useful when a deep understanding of a subject is needed and when researchers want to explore nuances, emotions, and personal experiences. This means that their experiences and perceptions might not be the same.

Based on their own genuine emotions and experiences, each participant uniquely expressed themselves. The researcher was able to accurately record the interviewees' words with the aid of voice recording. The interviews lasted 20 to 30 minutes, and the probing questions helped to unravel the rich data needed for the study.

The participants were free to use any language they choose when conducting these interviews. The participants were able to express their opinions in greater detail

because they were able to speak both in their native language and in English. Additionally, the participants' self-narratives during the interviews guided the questions that were asked. A follow-up with each participant was conducted to ensure that the findings from the data were in line with their answers. The researcher wrote a narrative of each interview and transcribed each interview from the recordings. Lesson observation for all four participants was the next stage of the study's data collection, and is covered in the following section.

3.4.2 Classroom Observations

Bertram and Christiansen (2021) state that observation entails the researcher physically visiting the study's focus area, such as a school, classroom or staff room, and watching what is happening there. (Walliman, 2021). describes observation as a systematic process of documenting the behavioural patterns of participants, objects and events while interacting with learners without necessarily asking participants what they do or communicating with them. Additionally, observation is a qualitative method of data collection that enables the researcher to comprehend the phenomenon being observed more deeply.

The researcher used observation as a method for gathering data by watching and listening to interactions. The researcher was able to observe reality as it developed and record what she saw, giving her a thorough understanding of the situation and the participants (McMillan & Schumacher, 2019). Through observation, the researcher was able to see how teachers taught reading to Deaf learners. In order to improve not only in the classroom but also at the school level, Zaare (2023) suggests that teachers use classroom observation as a tool to reflect on their own teaching methods and to learn from other successful teachers.

The researcher was able to observe and take note of the important aspects of the interaction. Based on the study's objectives, the researcher developed a brief checklist for classroom observation. Bertram and Christian (2021) claim that using observation as a data generation tool is much more effective than relying on other people's opinions and perceptions for understanding a situation. Although the participants have been given assurances of confidentiality, there has occasionally been mistrust because the researcher's presence artificially enhances classroom interactions.

Observations were made in classrooms with Deaf learners who have challenges with reading. The following were the main areas of observation in school classrooms:

- Teacher-learner interaction: Here, the primary focus was on how teachers interact with one another and with Deaf learners while teaching reading.
- Learner-learner interaction: In this section, the interaction between Deaf learners in the classroom was the main focus.
- Presentation of teaching materials by the teacher: The emphasis was on how the teacher is able to teach reading to Deaf learners.
- The difficulties that teachers may run into when working with Deaf learners in the classroom was also observed.

3.5 DATA ANALYSIS

Analysis of the gathered data is required in order to meet the study's goals. The analysis, classification, and interpretation of the data within the context of the study is explained in the discussion that follows. Kothari (2018) states that data analysis is the process of classifying collected data, for example, by using categories to extract useful information from raw data. In order to understand these unprocessed data and extract their meaning and pattern, data analysis is crucial (Bell, 2020). In qualitative studies, data analysis should start as soon as the initial data collection process is complete to determine if any information is required or missing.

Creswell, (2021.) describes data analysis as a continuous process requiring thought about the data generated. He also emphasises the significance of checking, tidying, transcribing, and reorganising data with a focus on highlighting information to be used in making recommendations and conclusions.

The study utilized thematic analysis to identify and document patterns in data. The researcher used a digital audio recorder and notes during interviews, playing multiple times for accurate interpretation. Thematic analysis involved understanding the data, creating initial codes, identifying themes, reviewing themes, defining and naming themes, and producing reports (Braun and Clark ,2019). The main themes from classroom observations and in-depth interviews were categorized into themes.

The research report includes participant interviews and observations, as well as direct quotations and participants' original utterances. A literature review supports the researcher's views, while also protecting the data's originality and presenting the results.

3.6 VALIDITY AND TRUSTWORTHINESS

Friesen (2020) asserts that a variety of elements may obstruct both the fair collection and interpretation of data. These variables include the researcher's own emotional investment in the subject, their preconceptions about it, opinions they form after reading existing literature, and interactions with participants, all of which can skew their ability to collect and interpret data objectively. To add, Kvale (2019) state that validity refers to the extent in which the method used measures what it is meant to investigate. This means that the research should yield accurate results by measuring what it is intended to measure and not something else. Validity is a concept most often concerned with quantitative research but, from the perspective of qualitative research, both validity is fundamentally concerned with the issue of trustworthiness. Validity pertains to the "correctness or credibility of a description, conclusion, explanation, interpretation, or other sort of account" (Maxwell, 2010:280).

Stahl and King (2020) emphasise that the researcher must make sure that the study's findings are accurate and not just what they think they are. Bertram and Christiansen (2015), who make a similar argument, assert that the researcher must ensure that the data collection tools they employ are standardised, reliable and transparent. Similarly, Guba (2019) suggests that qualitative researchers should take into account four components of trustworthiness when working to validate their studies which are dependability, credibility, transferability, and conformability.

3.6.1 Transferability

According to Finfgeld-Connet (2020), transferability is the extent to which the findings of qualitative research can be applied to different contexts or settings. However, transferability depends on the study's objectives. This implies that the study's goal of generalising the findings is the only way it can be met.

3.6.2 Credibility

Graneheim and Lundman (2022) state that credibility determines whether the research findings represent accurate interpretations of the participants' original views as well as credible and reasonable information derived from the participants' original data. To capture the interviews and data analysis, audio recordings were used. To ensure accurate transcription of the data, the recordings were played several times.

3.6.3 Dependability

Cohen et al. (2011) and Tobin and Begley (2014) point out that dependability includes participants' evaluations of the findings as well as the study's interpretation and recommendations, which ensures that they accurately reflect the data the study's participants provided. In order to remove bias, the researcher took participants' opinions and feelings into account when analysing and interpreting the data. The researcher invited the participants to read the results after the interpretation was complete and to confirm whether the results accurately reflected their opinions. During observation, notes were taken and recorded to ensure the validity of the study and its conclusions.

3.6.4 Conformability.

Elo (2022) argues that the foundation of qualitative research is the idea that each researcher approaches the research project from a unique point of view. The degree to which the results of a qualitative study can be endorsed or verified by others is known as confirmability (Anney, 2014). Confirmability was attained by making sure that the researcher did not fabricate the interpretation of the research findings, but rather that it was derived from the participant data. The researcher also used the reflexivity element, which aided in putting aside any personal background, beliefs, values or preferences that might have an impact on the research study. This was done in order to prevent bias from influencing the interpretations.

Leedy and Ormrod (2023:313) state that "the validity and reliability of your data collection instruments influence the extent to which you can learn something about the phenomenon you are studying, the likelihood that you have obtain significance in your data analysis, and the extent to which you can draw meaningful conclusions from your

data”. Reliability refers to the “application and appropriateness of the methods undertaken and the integrity of the final conclusions” (Noble & Smith 2015:34).

3.7 ETHICAL CONSIDERATIONS

Because of the involvement of people in the research process, ethics plays a significant role in educational research. From a moral standpoint, McMillan and Schumacher (2019) confirm that ethics is concerned with beliefs about what is right or wrong when engaging with the participant. To protect the participants’ rights and dignity, it is essential to abide by ethical principles. Several components of ethics were involved, including full disclosure, voluntary participation and informed consent. The researcher has asked the University of the Free State’s Faculty of Education Research Ethics Committee for approval before beginning the study and at the institutions where research was to be conducted (Appendix A, B, C and D). Following the granting of permission, the process of consulting potential participants started it was necessary to go over all of their rights as potential participants with them, and those who felt it was appropriate to participate signed a consent form (Appendix E) that ensured the confidentiality and security of the information provided. The rights of participants to voluntarily participate and withdraw was disclosed and guaranteed.

3.7.1 Informed Consent and Voluntary Participation

The study provided participants with enough details so they could decide for themselves whether or not to participate. Participants in the study were given consent forms after receiving all necessary information and indicated their willingness to participate voluntarily. Participants were made aware that they were not required to participate in the study and had the option of doing so. They were also told that they could stop participating in the study at any time if they decide they no longer wanted to.

3.7.2 Anonymity and Confidentiality

Throughout the interviews, privacy and confidentiality were respected. The researcher maintained the confidentiality of the recordings and notes. Participants’ names were coded. (Danna, Puyjarinet, and Jolly (2023) assert that even if the researcher is able to do so, the use of codes ensures that no one reading the research report will be able

to connect the response to a particular participant. This ensures that the participants' private data remains anonymous.

3.8 CHAPTER SUMMARY

This chapter gave an overview of the study's scope by describing the research paradigm, the research procedure and the methodological tools used. The chapter described the specific approaches, paradigms, and instruments that were used for data collection while also describing the type of study and its focus. The discussion focused on the data analysis procedure, the ethical issues that were taken into account, and the trustworthiness of the results. The final section of this chapter was devoted to ethical issues and the procedures that were used to ensure that both the researcher and the participants were aware of the objectives of the study and their respective roles within it. Everyone involved was viewed as important and valued individuals, and transparency was the key to this process.

The next chapter presents the data analysis.

CHAPTER 4: DATA ANALYSIS

4.1 INTRODUCTION

In Chapter 3, a comprehensive presentation of the qualitative research approach and design was discussed in order to respond to the main research question and sub-research questions of the topic under study. After the approval of my ethics application, data was collected. Participants' responses were noted during the data collection strategies described in Chapter 3 which were:

- Semi-structured individual interviews with four teachers from two different special schools.
- Classroom observations whereby the researcher was observing the participants while teaching reading to Deaf learners.

The purpose of this study was to explore Grade 1 teachers' experiences with teaching reading to Deaf learners in special schools.

This chapter presents and analyses the data gathered from the teaching of reading to Deaf learners in the classroom, the teacher's methodology, the instructional materials used, the learner's activities, and other pertinent activities occurring in the classroom, as well as the data from the interviews.

4.2 DATA ANALYSIS

The data is presented following the critical components that form the body of any classroom teaching/learning processes/lessons. I used these components to develop the themes/categories for data analysis. Having employed the guidelines of thematic data analysis prescribed by (Cresswell,2024). five themes were identified by the researcher. These are as follows: understanding how teachers teach reading to Deaf learners, strategies to support the development of reading to Deaf learners, creating a good classroom for all Deaf learners, challenges faced by teachers when teaching reading to Deaf learners in the classroom and support given by teachers to Deaf learners when teaching reading.

I chose to discuss each theme across the data collected from the participants and the lesson observations. The intention is to provide a clear picture of how each theme

appears across the board. In the discussions, I chose to represent the teachers with the symbol Teacher 1 (T1) to Teacher 4 (T4). I also chose to provide the data on each theme following the research questions, for purposes of ascertaining that the research concerns were covered, and the cohesion of the study is maintained. This follows that the interviewees were asked these questions during the interviews and the questions were also used as a guide for examining and analysing the data in the transcriptions.

4.3 DEMOGRAPHIC PROFILES OF THE STUDY PARTICIPANTS

Table 4.1 provides background information on the participants who took part in in-depth interview and classroom observation. The data were generated from two different settings, namely suburban and township schools as the research sites of the study. The demographic information of the participants is summarised in Table 4.1

Table 4.1: Biographical characteristics of participants

	Context	Gender	Age range (years)	Level of education	Teaching experience (years)
Teacher 1	Suburb	Female	40-45	B.Ed. degree	15
Teacher 2	Suburb	Female	45-55	Masters	22
Teacher 3	Township	Female	35-40	BA& PGCE	10
Teacher 4	Township	Female	40-50	B.Ed. degree	17

A total of four participants took part in this study of which two were black, and two white participants. All participants were women. The participants' ages ranged from 35 years of age to 50 years of age. Three participants had a Bachelor of Education degree, and one participant had a Bachelor of Arts Degree and Postgraduate Certificate in Education. Although this sample of how teachers teach reading to Deaf learners could be considered big, the feedback obtained from all of the participants was similar.

4.4 DEVELOPMENT OF THEMES

I used semi-structured interviews and classroom observation as the methods to understand the participants' perspectives about the study's research question: What

are Grade 1 teachers' experiences with teaching reading to Deaf learners in special schools? I developed both interviews guidelines and observation guidelines using the research goal, literature and theory in this study. In preparation for lesson observations, the data obtained from interviews assisted to understand each participants' perspectives about the research topic and to get an idea about how they do things in their classrooms. In addition, this study not only focused on the perspectives of the participants, but it went into the participants' classroom spaces in order to observe how they grapple with the teaching of reading to Deaf learners. Moreover, in this study, the language of teaching and learning was SASL, all participants and learners in this study communicate in SL. Table 4.2 shows the themes that emerged from the interviews and classroom observation

Table 4.2 Themes that emerged from the study

<i>Exploring Grade 1 teachers' experiences with teaching reading to Deaf learners in special schools.</i>	
1. How teachers teach reading to Deaf learners	(visuals) Picture books Letter cards Phonic word wheel
2. Strategies to support the development of reading to Deaf learners	Drawing pictures and keywords Using pre-reading stage Asking questions
3. Creating a good classroom for all Deaf learners	Learning-friendly environment Reducing visual noise Visually appealing
4. Challenges faced by teachers when teaching reading to Deaf learners in the classroom	Lack of SASL knowledge Lack of resources Untrained teachers
5. Support given by teachers to Deaf learners when teaching reading	Effective communication Inclusive classroom environment Visual materials

4.5 PRESENTATION, INTERPRETATION AND DISCUSSION OF DATA

In this section, to discuss and make sense of the data, I use various codes for the participants. I use the following codes: Teacher 1 (T1), Teacher 2 (T2), Teacher 3 (T3) and Teacher 4 (T4). In each theme, the data from semi-structured interviews were assembled and coded according to the similarities and differences of views and

answers. In the next section, I present and discuss the perspectives of the participants on teaching reading to Deaf learners’.

4.5.1 How Teachers Teach Reading to Deaf Learners

This section presents, interprets and discusses what Grade 1 teacher’s experiences when teaching reading to Deaf learners in the classroom. The participants had some common and different perspectives about how teachers teach reading to Deaf learners. For instance, when asked about their understanding on teaching reading to Deaf learners, in the interview, T1 explained that:

In Grade 1 the teacher must Focus on visuals. Picture books are great for helping Deaf learners learn to read. As a teacher you have to sign and fingerspell the word to the learner, point to the printed word and the accompanying picture, and then use the sign for the word. If you are teaching the learner to read lips, have the learner point to the picture, point to the word, and then watch your mouth as you slowly and deliberately speak the word.

T2 had the following to say:

A teacher who teaches Deaf learners must use letter cards. She stated that a way to help learners develop reading skills is to use letter cards. Letter cards can be used to demonstrate how individual letters form words.

T2 added that teachers can make a phonics word wheel to help. They must demonstrate the difference between vowels and consonants by putting letter card combinations into different piles. T2 revealed that teachers should aim to teach the learners a new combination every day.

Again, in the view of T1, teachers must read books to Deaf learners every day. The books should be age-appropriate and interesting. Reading together as a class will improve the learner’s vocabulary, develop visual skills and assist in reading comprehension. Learners will begin to develop a love of books. In agreement with T1, T2 added that teachers must read a story together with their learners and then use the theme of the story to make a new version or a new ending.

T1 and T2 were in favour of the social constructivism theory as both teachers stated that reading together as a class improved the learner's vocabulary, develop visual skills and assist in reading comprehension. According to Mitchell and Myles (2018), we learn not as isolated individuals, but as active members of society. Furthermore, Vygotsky (1978) claimed that learning occurs through dialogue. This dialogue is initially instrumental, meaning it takes place between teachers and learners, or even between text and reader (Wilson & Joye, 2016). However, the learner makes sense of what is said or written through internal or instrumental dialogue (Vygotsky, 1978).

Luke (2022) attests that social constructivists see reading, like learning, as social practice. The social context affects when you read, what you read, where you read, who you read with and, of course, why and how you read. Interacting with text can involve practices as diverse as reading instructions, scanning a newspaper or reading an academic article. Thus, when teachers are designing curricula for reading in SL classes, teachers first need to ask themselves what their learners need to be able to do in terms of social practice.

When asked how Grade 1 teachers teach reading to Deaf learners, T3 stated that she used the existing literacy programme that is specifically aimed at Deaf learners. Instead of relying on sounds to teach reading, this programme uses fingerspelling. Fingerspelling is the practice of using specific hand shapes that represent the letters of the alphabet (Nikisha, 2020). Fingerspelling is a fluent way of grouping syllables that can successfully teach Deaf learners to read. T3 explained the importance of fingerspelling. She stated that early exposure to fingerspelling helped learners become better readers, and positively correlated with stronger reading skills. She added that Deaf learners who were good finger spellers were good readers.

Evidence from the observations demonstrates the teachers presented concepts to be learned as a whole word. New words and sentences were either written out on boards, cards or blackboards and were taught exactly as wholes. There was no splitting or subdividing of the words into smaller parts guided by the sounds/phonics or otherwise. Learners were expected to sign whole sentences or words and to provide meanings of the words. This method is characteristic of the whole sentence/word approach of teaching reading. Beck and Juel (2020) refer to the whole word approach as a method to teach reading by introducing words to learners as a whole unit without analysing

their sub-parts. This method involves teaching learners to “sight read words”. Although the teachers used this method, they appeared not to have been aware of it, except for T3 who said that they were actually using the method. Mayer (2023) further reveals that the whole word approach has been transformed to the whole language approach. The approach involves language being learned as a whole; i.e., learned with meaningful and relevant text.

One may ask what kind of method is more productive or effective for teaching reading to Deaf learners. Several discussions have already been engaged regarding this issue. Rudolph and Robertson (2019) challenge the use of the whole word approach and advocated for the return to the phonics methods, but because they lack evidence, this argument has yet to be considered (Beck & Juel, 2022). Rudolph and Robertson (2019) also revealed other educators’ beliefs on the same topic. This included questions on how one would be able to pick parts of the words to help understand the meanings if one was using the whole word approach only. Light (2018) agrees with this and claimed that signing of unfamiliar words would be difficult if one had not been introduced to phonics. Easterbrooks and Lederberg (2021), however, claim that it is productive to use a combination of methods. The whole word approach is limited in amount of words memorised by learners (Price, 2020). Price also noted that if one ignored the sound clues and concentrated on design clues, one ran the risk of frustration and possible developmental dyslexia.

Grushkin (2018) argues that fingerspelling provides a linguistic link to English vocabulary and syntax. Padden and Ramsey (2021) investigated reading ability of Deaf learners in the first grade. The results revealed that knowledge of specific SASL structures, including fingerspelling, correlates with reading achievement. Furthermore, in their study, learners who scored better on reading tests were competent in associative skills, such as the ability to write down words that were finger-spelled to them as well as the ability to translate initialised signs. To add, looking specifically at performance on the fingerspelling tasks, fingerspelling ability significantly correlated with reading comprehension: “better readers were better at recognising finger spelled words and writing them down in print” (Wiles, 2019:308).

T1, T2 and T3 indicated that Deaf learners learn reading when there are visuals in front of them. The participants stated that teachers use visual strategies for

incorporating fingerspelling into classroom instruction. Haptonstall and Schick (2016) found that learners' retention of new vocabulary increased when lexicalised fingerspelling was added to instruction. Hile (2019) revealed a strong relationship between fluency in fingerspelling and reading. The research is clear that fingerspelling and reading are intertwined and that they converge for Deaf learners, who have early access to visual language, around the first grade. The convergence of these skills facilitates literacy development in Deaf learners, allowing them to achieve reading levels that exceed the historically low norms.

T4 responded as follows:

Deaf learners can develop the same reading skills as hearing learners. However, it may take longer for them to develop the necessary language-based skills and require additional classroom support. So, the same principles of systematic evidence-based reading instruction will apply, but learners may need visual alternatives, sign language, or other forms of manual communication for listening and speaking activities.

T4 mentioned that she worked with the speech language pathologist and other professionals to develop a reading intervention plan so that she could assist her learners. In agreement with T4, T2 stated that more activities, repetition and revision strategies should be used together with the direct and indirect vocabulary instruction strategies to help learners read. Both teachers emphasised that direct vocabulary-developing strategies should be used more than indirect vocabulary-developing strategies in order to develop the vocabulary of Deaf learners.

From all the participants, it was evident that the use of visual support assisted Deaf learners with reading. In the interview all teachers indicated the importance of using the visual aid to support reading. The social constructivist theory points out that teachers need to ensure that they are not reading on behalf of the learners in their reading classes (Wertsch, 2019). In their pre-reading, during-reading and post-reading exercises, teachers can sometimes provide so much support that the learners do not really have to read the text at all. Instead, they need to empower learners to choose what and how to read in ways which suit their own needs and purposes, this can happen by allowing learners to use visual aid (Penrose, Geisler & Wilson, 2021).

Limitations on the part of all four teachers on what constitutes a method were conspicuous. Given that they named strategies/techniques such as demonstration, explanation, observation, illustration (that give the implementation framework for the general teaching learning approaches) and took them to be methods for teaching reading.

Evidence from the observations demonstrates the teachers presented concepts to be learned as a whole word. New words and sentences were either written out on boards, cards, or blackboards and were taught exactly as they were. There was no splitting or subdividing of the words into smaller parts guided by the sounds/phonics or otherwise.

4.4.2 Teaching Strategies to Support the Development of Reading to Deaf Learners

Teaching strategies refer to the methods, techniques, procedures and processes that a teacher uses during instruction (Hattie, 2019). It is generally recognised that teaching strategies are multidimensional, and their effectiveness depends on the context in which they are applied.

T3 stated:

There is no single strategy that can guarantee better reading outcomes.

However, she highlighted a number of practices that enable Deaf learners to learn how to read. T3 mentioned that the first stage of development is the pre-reading stage. The responsibility of the teacher is to encourage reading interest with enjoyable experiences and activities, with an emphasis on using SL. The principal goal at this stage is to ensure that the learner is socially, mentally, emotionally and physically ready to learn to read. T3 added that spatial development is important at this stage as learners are taught to recognise spaces between words and the descending order of the lines in a text. T3 mentioned that when she read stories she did it with lots of expression, in order to capture the attention of the learners. She explained that she asked questions about what was going on in the story as the reading went along, to make sure that they understood the meaning of the story.

According to Pullman (2017), reading for pleasure is so much more than just a form of play or escapism it is also a way of connecting with text which is something that T1

stated that she did in her classroom. Furthermore, Griffin (2019) mentions that Deaf learners who read very little do not have the benefits that come with reading, and studies show that when struggling readers are not motivated to read, their opportunities to learn decrease significantly (Baker, Dreher & Guthrie, 2020). This can lead to strong negative feelings about reading and create a vicious circle in which poor readers remain poor readers (Juel, 2019). Reading for pleasure is not just a leisure activity; it is a powerful tool for personal development, intellectual stimulation and enrichment and emotional well-being. It enables someone to be more conversant with others.

According to the results, teachers used a variety of instructional materials which were mainly real objects, chalkboards, classroom furniture, charts and flashcards used as a support to the teacher's methods in teaching the Deaf learners to read were either introduced before the new words were taught or were used during the teaching to convey or consolidate the concepts learned. Although the use of these instructional materials varied in use by the teachers, they presented a similar pattern of use.

T2 and T3 explained that drawing pictures and keywords sharing the meaning/content of the picture with the learners was another effective teaching strategy to teach Deaf learners how to read. To add, learners could draw a picture of something of their choice and then explain to the class what was going on in the picture. The picture could be a simple scene (such as a family eating dinner) or it may be a full story. They indicated that learners could do this collectively, as a class, or in smaller groups, looking at a painting, a photograph or a drawing, analysing the image and choosing a title. T2 indicated that for Deaf learners, learning to read can be a difficult task.

In support of T2 and T3, Mark (2023) argues that beginning readers who use pictures and illustrations to assist with learning to read have several advantages. However, when addressing reading difficulties, those illustrations can sometimes hinder progress. Moreover, using illustrations helps learners learning speechreading and phonological awareness, make predictions, sequence plots, make connections and enhance their comprehension skills. Yet, illustrations can also impede in children learning to read accurately, especially when those learners who are struggling with reading already have difficulty with speechreading.

T1, for example, included curriculum materials, while the blackboard featured largely among the materials named. It was interesting to note that no teacher mentioned anything regarding adaptations of or the use of adapted teaching aids. I observed that the instructional materials referred to by all the four teachers could equally be used for other ordinary classes (classes for learners without those with hearing impairment); such as charts, drawings and real objects. Evidence also reveals that cards, charts (representation of real objects) and the real objects were commonly used by all the teachers.

T4, an experienced teacher with 22 years' experience narrated that when she started working with another learner in the class, she observed that using pictures and illustrations had a negative impact on the learner's reading abilities. She could not decode accurately, so when she would read simple stories she would guess words based on the context of the story and the illustrations she saw with it. She used this and the first letter of the unknown word to guess what she thought belonged there. As stories got harder with more words, more complex sentences, longer stories, and fewer pictures, the learner's comprehension was affected due to guessing words when they did not have the phonological awareness skills to appropriately sign out an unknown word. Sydney (2020) argues that using pictures and illustrations with beginning readers has more advantages than not, but for struggling beginning readers, it is crucial to determine that they have the age-appropriate phonological awareness skills to succeed.

4.4.3 Creating a Good Classroom for All Deaf Learners

Communication is vital to building an inclusive environment and since the eyes act as both eyes and ears, gathering information and messages for Deaf learners, the physical development of the classroom needs to be arranged strategically. Full accessibility needs to be available to all Deaf learners, in terms of giving full access to academic subject matter, communication about subject matter, and interaction with adults and peers in a smooth and natural manner (Danna, Puyjarinet, and Jolly, 2023).

The Department of Education's Draft Guidelines for the Implementation of Inclusive Education (2002), identifies other indicators for factors impacting learning environments as being caused by:

Socio-economic situation, attitudes to difference, culture of the school, curriculum/learning programmes, communication, accessibility and safety of built environment, support from school/district, parental involvement, capacity amongst educators, capacity amongst senior management, general dysfunctionality of school, assistive devices, availability of learning support materials/resources and violence/abuse. (Department of Education, 2002:84).

It needs to be made explicit that an inclusive education approach is not only aimed at learners with disabilities or special needs but rather at all learners. There are learners who experience barriers to learning caused by “children living in poverty, children from ethnic and linguistic minorities, girls (in some societies), children from remote areas and so on” (UNESCO, 2002:11). Deaf learners would be included as a linguistic minority group as Deaf people do not see themselves as disabled, rather as members of a linguistic minority group who use SL (and SASL in South Africa) and are part of the Deaf community.

The ideal environment for Deaf learners when learning to read is one in which they are not singled out as different but, instead, benefit from the kind of adjustments which go unnoticed by others but are truly transformative for the learner. Many people see deafness as just a loss of hearing; however, it is more complicated and creates unique problems for learners (Çetin & Gündoğdu, 2020). Most learners who were born deaf or lost their hearing before age 2 have never heard English. The communication language used by all learners who are hearing impaired in South Africa is called SASL. This language has its own syntax and grammar. Mark (2023) states that in order to create a positive classroom for all Deaf learners, it is important to understand that learners may need to use speechreading (lip reading), use hearing aids and require interpreter or real time captioning services to make it through their curriculum.

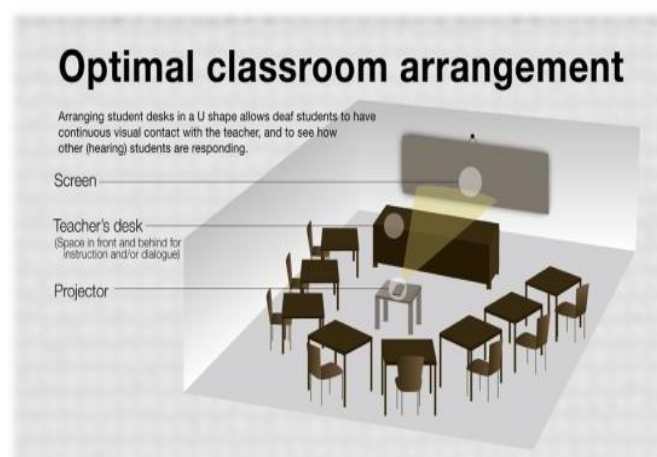
T1 described ways in which she created a good classroom environment for her Deaf learners. She stated that she made sure that she reduced visual noise as Deaf learners often use their eyes to listen. Just as background noise can make it hard to hear what someone is saying, visual busyness (patterns, clutter, flashing or moving graphics) can make it hard for someone to visually focus on signs, lip reading, or facial expressions.

According to Visser (2021), Deaf learners' behaviours can be affected by too much or too little environmental lighting. To add, Evans and Lovell (2019) argue that too much light creates a "dazzling" on white boards and learner's desks, which becomes a visual distraction. Deaf learners primarily use their vision to communicate, sufficient lighting and control of excessive lighting is important and is likely to increase attention when reading (Proshanskyn & Wolfe, 2022).

T1 concurred that lighting was necessary for Deaf learners as it also assisted them when they are reading. Furthermore, she discussed ways in which she decreased noise in the classroom and created a listening and learning-friendly environment for learners. Firstly, she used rugs or carpeting: Placing rugs or carpet around the room helped to absorb sound, while also making the room more visually appealing and comfortable for Deaf learners. Secondly, she placed soft tips on the bottom of chair and table legs. Chairs and tables are moved around frequently in the classroom, causing unnecessary noise, so, adding soft tips to the legs of furniture can decrease this noise significantly.

Seating in the classroom should be arranged into a semi-circle (U-shape), to allow Deaf learners to have visible access to the mouths and faces of each learner in the classroom, as well as the teacher. This enables the learners to be able to either read lips or facial expressions, allowing them to fully participate in class discussions, and know who is speaking and seeing their reactions.

Figure 4.1 Optimal classroom physical arrangements for Deaf learners



Source: Riazati (2021:390)

Figure 4.1 presents a diagram that illustrates how Deaf learners should be seated in their classroom to accommodate their needs. This diagram incorporates the U-Shaped formation of desks where each learner is in clear sight of each other, along with the teacher being clearly visible. For times when learners are asked to go to the carpet for various lessons, learners sit in a circle or semi-circle. Having the carpet in the centre of the U-shape arranged desks optimises the space in the centre that might otherwise be wasted. Within the classroom, desks and tables should be arranged in a circular or semi-circular fashion as this enables group work with the Deaf learners which creates a successfully communicative environment.

When T2 was asked how she created a good classroom for Deaf learners, she clarified that when learners were reading she invited them to sit at the front of the classroom. She stated that as Deaf learners used an interpreter or relied on lip reading, visual clues or a hearing aid, being closer to the front helped them learn. To add, the teacher said she ensured that she was facing the classroom when she spoke, not the whiteboard. Responding to the same question, T3 said that good lighting was also essential so they could see the teacher clearly. She said in her classroom she spoke normally and clearly, emphasising keywords, repeating and rephrasing when necessary. When learners were doing group reading, she assisted Deaf learners by positioning them in a circle so that they could see all the other learners as they spoke.

From the observations, there was also space left in between the rows for teachers and learners' movements. On the walls, there were a number of charts with drawings. All the teachers, when asked about the importance of the charts on walls, answered that it was for the learners' learning incidentally. Since these charts had some labels and writings on them, I concluded that the learners were also learning to read by reading the writing/labelling on the charts. This is in agreement with Nikisha (2019) who sees incidental learning as a process in which learners gain knowledge from interactions with the environment. To him, the learning process lacks formal structures or objectives but is guided by real-world experiences. Education is thus self-guided by the learners.

Marshall and Rossman (2019) assert that teachers must encourage Deaf learners to seat themselves toward the front of the classroom where they will have an unobstructed line of vision. This is particularly important if the learner is using an

interpreter, lip-reading, relying on visual clues or using a hearing aid which has a limited range. In a similar way, Vernon (2017) mentions that teachers must not speak when facing the blackboard, teachers must be aware that moustaches, beards, hands, books or microphones in front of their face can add to the difficulties of lip-readers. Furthermore, Deaf learners who lip-read cannot function in darkened rooms and teachers, thus, need to adjust the lighting in their classrooms.

4.4.4 Challenges Faced by Teachers when Teaching Reading to Deaf Learners

Teaching Deaf learners can present a unique set of challenges for teachers. According to Milone (2018) in his interview with Jennifer Herbold on *A Teacher Takes on the Challenges of Deaf Literacy*, she responded that it can be difficult to teach Deaf learners to read. The participant also said she strongly believed, and that there was considerable research to support this opinion, that the difficulty was due to external as opposed to internal factors. The majority of learners arrive with very little language. Most of them are not exposed to SASL or to any fully accessible language from an early age.

As mentioned in the literature review, education is a fundamental right, which extends equally to all learners throughout South Africa, and it is the responsibility of the education system to develop and sustain learning. The Draft Conceptual and Operational Guidelines for the Implementation of Inclusive Education state that, “a complex and dynamic relationship exists between the learner, the centre of learning, the broader education system and the social, political and economic context of which they are all part” (DoE, 2002:130). Each of these plays a major role in whether effective learning and development occur. If a problem arises in any of the above components, it impacts the learning process, causing learning breakdown or exclusion. Thus, if the system fails to meet the different needs of a wide range of learners or if problems arise in any of these components, the learner or the system may be prevented from being able to engage in or sustain an ideal process of learning (DoE, 2002:130).

The factors that lead to learning breakdown and prevent Deaf learners from reaching their full potential are known as barriers to learning and development. EWP6 identifies the following as barriers to learning and development (DoE, 2001:7 & 18):

- Negative attitudes to and stereotyping of differences

- Inflexible curriculum
- Inappropriate languages or language of learning and teaching
- Inappropriate communication
- Inaccessible and unsafe built environments
- Inappropriate and inadequate support services
- Inadequate policies and legislation
- Non-recognition and non-involvement of parents
- Inadequately and inappropriately trained education managers and educators.

T1 responded by explaining that as a teacher she is faced with the challenge of developing learners' world-knowledge and general semantics (in both SASL and English) at the same time that she taught them to read. For example, many of the learners arrived at school with no or very little understanding of "wordiness", the metalinguistic concept that "words" exist. Even at kindergarten, they are already a few years behind their peers.

Stanovich (2019) states that people need to acquire a first language to be able to learn a second and third language. For Deaf learners, the only language that is acquirable is SASL and this is true only if SASL is used constantly and consistently in the environment.

T1 said that as a teacher, one should be creative and find their own methods to help the learners in class with teaching materials. She concluded by saying that small things such as nice blackboards for writing, pictures of different drawings, chalk and dusters presented a challenge for them since they had to wait for the support from the government and it took time to obtain it.

The participants expressed that most of the teachers did not have the necessary signing skills in SASL to prepare them to use it as a medium of instruction in the teaching of Deaf learners. One aspect of communication that was shared by all the participants was that there is a general sense of miscommunication and misunderstanding between the educators and the learners. Some teachers still used inappropriate communication methods such as the oral method of teaching Deaf learners, Total Communication or Signed Exact English and had no motivation to learn SL "because the Department of Education does not expect educators at schools for

the Deaf to have SASL skills” (DEAFSA, 2003:10) and because they had not supported the bilingual-bicultural model to literacy development in the education of Deaf learners. “SASL is still not officially recognised as a separate learning programme for Deaf learners” (DEAFSA, 2003:11). Deaf learners are still forced by the DBE to either take two spoken languages or one spoken language provided that another subject is offered in lieu of one language that is not offered. Deaf learners can still take SASL as one of the languages.

T2 mentioned that the challenges that she faced when teaching reading to Deaf learners was:

that Deaf learners have trouble understanding language, and that many have not mastered the grammar or syntax of the English language to the extent that much younger normal-hearing learners have.

This is supported by Kirk and Gallagher (2018) who revealed that the learners do not have uniform skills on the use of SL signs. On the part of the teachers, the study revealed that they needed adequate skills on the use of the existing sign language to enable them to fulfil the requirements in implementing the new trends in teaching and move together with the other teachers in regular schools.

T3 indicated that she needed to be equipped with adequate methodology and instructional skills in order to effectively and efficiently handle curricular innovations by the DBE with confidence. She mentioned that she was concerned about the lack of consultation with those who were on the ground when new trends in teaching were being brought in. She, however, appreciated that not all that was brought in was irrelevant, but that some ideas that would work well for most learners might not easily be implemented and workable for Deaf learners. Another area of concern was that teachers did not use the phonic chart. The teachers did not use this one because Deaf learners had no speech sound at all to help them learn to read. They read using different hand shapes. The methodology did not provide for them from the curriculum developers on how to go about using the phonic chart as a result of this the phonic kit becomes irrelevant for Deaf learners.

Moreover, T3 stated that she had a challenge with the availability of teaching resources for use, especially when new programmes were introduced and she needed

other resource materials to support the teaching of reading to Deaf learners. This, therefore, shows that training for teachers of the Deaf learners should be recast in certain cases to make the methodology relevant and should be based on a system of identified needs.

T4 felt that she needed training in both technical skills and social skills which would help her handle learners who were coming into school for the first time to communicate more easily. According to all the participants, they stated that some workshops that they attended were helpful because they enabled teachers to share ideas on how best to make modifications in their teaching so that they suited Deaf learners.

T1 and T4 expressed another challenge that they experienced in their classroom. They mentioned that some words that were taught to children have no signs while others had similar signs, such as 'have/has/had' but were written differently. This, therefore, poses a big challenge to the teacher either to find a sign for it. In some cases, teachers omitted those words, making it difficult to construct a sentence using the Sentence Makers and Word Cards. This, therefore, means that it was difficult for the Deaf learners to construct sentences because they had not found a sign for that particular word.

T3 stated that another challenge was the lack of reading materials.

I found that a lack of reading materials inhibited the teaching and learning of reading in Grade 1.

Many classrooms had a shortage of posters, which made the classrooms unattractive to the learners. The Grade 1 teachers felt that they had been forgotten because they were in township areas. I found that factors contributing to a lack of reading materials in most schools were a lack of libraries and computers, which could help learners to download interesting reading material. The above result confirms the findings of a study by Mojapelo and Dube (2018) who found that a lack of reading materials leads to learners' poor reading abilities. Using different reading materials relevant to the learners' level of cognitive development can increase their reading proficiency (Wessels, 2020).

All participants indicated that it was challenging to implement assessments of reading strategies that they did not understand. Teaching reading was also reported to be a challenge. The teachers only knew the traditional strategies of teaching reading and did not possess a deep knowledge of reading instruction. This finding is consistent with previous studies conducted by the DBE (2008), Desta (2020) and Rule and Land (2017), who maintain that most primary school teachers, in South Africa do not have sufficient knowledge of reading instruction, which leads to learners' poor reading proficiencies. Poor knowledge of reading instruction leads to high levels of illiteracy and drop-out from school in many countries.

4.4.5 Support Given by Teachers to Deaf Learners when Teaching Reading

Teaching Deaf learners can be very challenging for teachers, especially when dealing with learners with unique language needs (Knoll, 2017). Therefore, there is a need for support for Deaf learners. Sign language is a unique language that relies heavily on visual communication, body language, and lip movements, and is often supplemented with voice. For individuals with special needs, such as Deaf learners in schools for the deaf, learning this language is essential. However, to effectively teach SL, teachers require specialised strategies that cater for the unique learning needs of their learners.

Deaf learners face unique challenges when it comes to language development and communication (Rienties, 2020). Their inability to hear spoken language can create significant barriers to communication, leading to difficulties in reading (Milone, 2018). As a result, Deaf learners may require specialised educational services to address their needs.

T1 revealed that to support her learners when they are learning to read she has developed inclusive classroom environment that provide opportunities for all Deaf learners to communicate and interact. She argues that effective communication is paramount for teachers and learners in the teaching process as it enables learners to comprehend the material being taught.

The classroom itself can help or hinder the learner's success in the classroom. Most Deaf learners depend on their vision to either speech-read the teacher or to watch an interpreter, so the physical aspects of the classroom become very important.

T2 explained that in her classroom she provided handouts and course materials in advance as learners would not be able to read handouts and lipread at the same time and it could prove a useful context for lipreading. In addition, she ensured learners could always see her face so they could lipread.

Weinstein (2019) argues that using picture books for building reading skills inspire visual thinking. Illustrations in a picture book help learners understand what they are reading, allowing new readers to analyse the story. If learners are having difficulty with the words, the illustrations can help them figure out the narrative, which can increase their comprehension. Communication is a key part of learning. Learners who are deaf may find it challenging to understand others. Moreover, Deaf learners may tire easily from the effort and concentration involved in communicating, lip-reading and watching interpreters. Learners may rely on visual cues, technology such as cochlear implants, as well as spoken language to understand what is going on around them.

T3 mentioned that clear communication was vital for students who were deaf or hard-of-hearing. Furthermore, she stated that she spoke clearly, and did not exaggerate her speech. Exaggerating and shouting can distort speech and lip patterns, making it harder for learners to understand the speaker.

A visual aid is typically used to help an audience understand and remember information in a presentation. It can also be used to maintain an audience's attention and inspire listeners to action. Visual strategies help learners focus on important information, see how concepts are connected, and integrate prior knowledge with new knowledge (Marschark, 2017).

Multi-sensory instruction that emphasises visual supports will optimise learning opportunities for learners who are deaf.

T3 supported her Deaf learners to understand what was being taught in the classroom by using visual cues and by clarifying and communicating important information and concepts in a variety of ways. In addition, she presented information as visual pictures, captioned videos, video clips and graphics.

From the observations, it was clear that a lack of printed materials hampered the teaching of reading at schools. T1 and T2 lamented their unattractive classrooms,

which did not appeal to their learners due to the lack of supportive pictures in the classroom. If printed materials are available, and Grade 1 learners are exposed to them in class, this will contribute to their development of reading skills. This shows that many township school classrooms lack printed materials, and this can negatively impact learners' reading proficiencies. Printed materials are teachers in their own right. This means that from printed materials, learners can learn reading anywhere, or in the absence of a teacher.

Berent (2018) argues that there is a strong argument in favour of visual resources and visual language input in the education of the Deaf, given the important role of visual communication for Deaf learners. Although the role of visual communication can be promising, Baker (2020) points out that there is a need to pay attention to the way visual resources are presented so that Deaf learners do not divide their attention between these visual sources, but rather deal with them effectively in order to enhance their learning.

Luckner, Bowen and Carter (2021) state that visual materials that support communication may benefit the entire class. Subsequently, Luckner et al. (2021) suggested implementing visual aids like photographs, class itineraries, computers, movies with closed captions and providing instruction in the classroom that can assist Deaf learners with reading. Where processing of phonological information is limited due to hearing issues, the visual medium is crucial in creating connections between words and meaning (Devincentis, 2020).

The teachers made most of their movements at the front of the class. This only changed when they moved round the class to support individual learners. In general, movements served as a technique to support the teacher's method of work. Naturally these movements draw the learner's attention to focus on where the teacher is positioned and also indicate to the learners that specific attention is required of them (especially if made towards the learners). On the whole, the teacher movements did not interfere with their signing, an aspect that is critical to the instruction.

The DoE acknowledges that they have a role to play with regard to training and support of educators with regards to curriculum adaptations "the focus of should be on

supporting all teachers in curriculum adaptation and classroom management to support diversity” (DoE, 2002:26).

4.5 SUMMARY

This chapter presented data on the participants’ experiences with teaching reading to Deaf learners in special schools. The participants stated that teaching is one of the most creative, innovative jobs. There simply is not a one-size-fits-all approach to teaching. Therefore, the most dedicated teachers adapt their teaching methods according to whatever their learners need. The finding therefore reveals that Deaf learners learning reading for comprehension skills need to be exposed to learning resources which meet their unique reading needs. These resources should be special resources beyond the normal resources used in a regular reading class. It is evident that in order to teach reading to Deaf learners’ teachers should set Deaf learners up for success by adapting their teaching methods to support their learning. They should also prepare their classrooms, ensure that they have a clear line of sight at all times and reduce background noise by shutting the classroom door. Deaf learners should be included in the plan of action, so they feel empowered.

I have observed that it seems that the problems of Deaf learners in Grade 1 are very different from those experienced by many other learners with learning challenges because deafness combines problems of disability and language. They could be regarded as disabled, or as hearing-disabled, which they prefer, with their first language being SASL rather than English. My personal opinion is that they fall within the socio-linguistic paradigm. Other minority language and cultural groups do not have the same communication problems as Deaf learners as they can speak normally, while Deaf learners have to communicate by means other than speech such as interpreters or writing.

The next chapter concludes the study.

CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The preceding chapter focused on analysing data obtained from semi-structured interviews and classroom observations. This chapter presents a summary of the main findings of the study, conclusions and recommendations it draws together the emerging story from previous chapters, and discusses the findings, according to the original research themes and subthemes stated in the introductory chapter. Moreover, I review how the theoretical framework of social constructivism and research questions relate to the findings of the study. Lastly, I present the recommendations for future studies. A phenomenological approach was used to gain knowledge. The approach allows for the observation of cultures in their natural setting to understand interactions among its members (Frankel, 2023). Therefore, this methodology provided a relevant framework for understanding how Deaf learners learn how to read.

The purpose of this study was to explore Grade 1 teachers' experiences with teaching reading to Deaf learners in special schools.

The main research question for this study is:

What are Grade 1 teachers' experiences with teaching reading to Deaf learners in special schools?

1. How do Grade 1 teachers teach reading to Deaf learners?
2. What challenges do teachers face when teaching reading to Deaf learners?
3. What strategies can be used to successfully support the development or improvement of reading to Deaf learners?
4. Why do Grade 1 teachers' experience difficulties when teaching reading to Deaf learners?

5.2 FINDINGS

The purpose of this study was to explore Grade 1 teachers' experiences with teaching reading to Deaf learners in special schools. Information was obtained through observations and interviews. Results are presented using themes related to the four secondary research questions. These, in turn, informed the primary research question.

5.2.1 How Teachers Teach Reading to Deaf Learners

The study investigated the interactions of both teachers and learners when teaching reading. All participants described that different methods can be used to teach reading to Deaf learners. One approach is the speechreading method, which can be relatively easy and effective in facilitating communication between teachers and learners. This method involves focusing on the speaker's mouth to understand the message, which can be useful for learners who have recently entered special schools and are new to the learning process. On the other hand, using SL can be a more time-consuming and challenging approach, but it is recognised as a suitable method for Deaf learners. Both methods can effectively facilitate communication between teachers and learners.

Speechreading, also known as lip reading, involves understanding the lip movements of the speaker during the conversation (Smith & Bekker, 2021). This method is a crucial component of learning reading for Deaf learners, as it allows them to comprehend what others are saying orally. While speechreading, Deaf learners pay attention to facial expressions and language knowledge, which are crucial in teaching SL to learners. Facial expressions and body language are significant aspects of SL and provide important cues for communication. By focusing on these visual cues, Deaf learners can develop a better understanding of the spoken language and improve their communication skills.

All participants indicated that they use the manual method, which involves using hand gestures, namely, SL. One type of manual method is fingerspelling, which involves using finger movements to symbolise letters, words, numbers, or sentences. Fingerspelling is a versatile technique that can be used to spell a person's name, city name, abbreviation, acronym, or a word that does not have a corresponding sign (Wiesel, 2020). According to the participants when using fingerspelling, there are specific techniques to use it effectively. One essential factor is choosing a suitable position or place that is easy for learners to see. Additionally, having relaxed hands is crucial to ensuring clear and accurate fingerspelling. These techniques are essential in effectively teaching fingerspelling and improving reading skills for Deaf learners.

Constructivism contends that language helps to construct knowledge and assign meaning (Gisladdottir, 2021). This process starts in our social interactions and extends

to our educational experiences. Therefore, language helps develop mental processing and thought patterns (Kozulin, 2023). This was evident in the experiences relayed by the participants.

Based on the aforementioned, it can be concluded that the manual or signing method is an effective approach to teaching reading to Deaf learners. The results indicate that the cue method improves the social interaction skills of Deaf learners. However, the manual method is particularly suitable for Deaf learners with severe hearing loss, such as those unable to distinguish sounds or those who do not respond to auditory stimuli.

5.2.2 Strategies to Support the Development of Reading to Deaf Learners

Learners who are deaf have a variety of backgrounds and needs. The participants provided tips and strategies to increase reading ability outcomes for Deaf learners in the classroom. Teaching Deaf learners presents both challenges and important opportunities for classroom teachers, especially in the areas of reading. Based on the participant's experiences working with Deaf learners across a range of education settings, they identified two principles for supporting the unique language and literacy development of Deaf learners in the classrooms. The four teachers indicated that following these principles creates rich environments for language and literacy growth for all learners and are uniquely supportive of Deaf learners.

The results of this study presented the two broad principles for instruction aimed at supporting Deaf learners in reading in special school settings and gave specific considerations for putting each into practice. The first principle is to optimise access. The participants indicated that classroom instruction relies on both auditory and visual modalities to convey new ideas and facilitate communication. Therefore, the first principle of supporting the development of reading for Deaf learners' effective is to optimise access to content and conversation (Winston, 2019). The participants stated that teachers must set a classroom expectation for having only one speaker at a time, with a brief pause between speakers. This expectation supports respectful forms of communication and discussion in general, but it is particularly helpful for Deaf learners with a range of communication preferences. Learners who use SL interpreters benefit from one speaker at a time because interpreters can only interpret for one speaker at a time (Luckner & Muir, 2021).

The findings of the study also revealed that teachers should consider other sources of noise when choosing a preferred spot. For example, a position closer to the front of the room may also be closer to a radiator or air conditioning unit that interferes with learners' hearing or concentration (Johnson, 2020). In addition, it is important that learners are sitting in a location with clear sight lines to the teacher or interpreter so that information from mouth shapes, facial expression and signs can be used.

The second principle is to make content and thinking visible. Deaf learners are not unlike their hearing peers when it comes to the need for high-success reading experiences. However, Deaf learners may approach reading with relatively little background knowledge, vocabulary or innate ideas of what "sounds right" when it comes to spelling, grammar and word choice (Easterbrooks, 2020). Moreover, teachers must use visual cues for word learning. Deaf learners benefit from approaches to word learning that link visual patterns to meaning and sounds rather than relying on sounds alone. Word study programmes where learners learn families of words by reading, writing and sorting them ensure lots of exposure to the written representation of words and the opportunity to learn and apply patterns to solve unknown words.

The participants argue that increasing attention to patterns of classroom talk may be uniquely helpful for Deaf learners, but it can also create stronger classroom communities in which everyone takes responsibility for ensuring that communication is clear and inclusive. Similarly, facing learners while speaking (rather than talking to the board or looking down at a page) may become a habit because of Deaf learners, but it may in fact enhance the teachers' view of the whole class and their awareness of learners' understanding and behaviour in real time.

5.2.3 The Challenges Faced by Teachers When Teaching Reading to Deaf Learners in the Classroom

The findings revealed that the teachers' perceptions of the factors influencing teaching of reading to Deaf learners were affected by the nature of the teachers' understanding of the learners and the provisions made to support the teaching. This was characterised by the challenges the teachers named, that depicted lack of support services and other relevant tools/ materials to be used by the teachers and the

learners. I attribute many of their challenges to their lack of effective training and readiness for the task. T2 suggested that some learners had a problem with their eyes and that was why they could not read correct words. It is not surprising that all the teachers except T2 claimed that most of the learners were slow learners and hence limited the kind of “methods” they used for teaching reading. T2’s response was unique and informative. This too demonstrated the attitude of the teachers towards their learners and their inability to appreciate the learners’ learning challenges.

Berke’s (2019) observations on challenges met by the teachers of the Deaf were also true for this particular study. Parents were reported to be preoccupied with ensuring that basic needs; such as food and shelter, for the family survival were met; rendering learning of SL difficult. This situation was predominant for most families of these Deaf learners. Teachers often learned SL or improved their SL while at school (through teaching the Deaf learners). In most cases, such teachers would be offered short courses to update their signing skills. Evidence has confirmed that parents have an impact on their children’s learning (Davis, 2017). Learners’ learning can be shaped as children imitate their parents’ language and behaviour or through their parents’ modelling of positive behaviour and engaging of their children in social conversations (Thompson and Thompson, 2023).

The teachers in this study expressed the need for adequate methodology and instructional skills to effectively manage curricular innovations introduced by the Department of Basic Education (DBE) with confidence. They were concerned about the lack of consultation with frontline educators when new teaching trends are implemented. While they acknowledged that some innovations are beneficial for Deaf learners, they noted that others are difficult to implement. The teachers highlighted the need for training in both technical and social skills to better communicate with new learners. Additionally, they faced challenges with teaching certain words that have no signs or similar signs, leading to difficulties in constructing sentences with sentence makers and word cards, which in turn hampers the learners' ability to form complete sentences. Teachers expressed significant concern about the phonic chart, which they did not use because Deaf learners lacked speech sounds to aid in learning to read. Instead, Deaf learners read using different hand shapes. The curriculum developers

did not provide a methodology for using the phonic chart with Deaf learners, rendering the phonic kit irrelevant for this group.

This study has also shown that in most cases teachers had a challenge of the availability of teaching resources for use, especially when new programmes were being introduced. In this study, teachers needed additional resource materials to support the teaching of reading. Training for teachers of Deaf learners should be revised to ensure the methodology is relevant and based on identified needs.

5.2.4 Support Given by Teachers to Deaf Learners When Teaching Reading.

Dimling (2020) argued that intense, targeted interventions that use evidence-based approaches are imperative for Deaf learners to minimise the challenges and maximise language development. Likewise, Shanahan (2017) suggested that the teaching of reading comprehension and learning from text should focus on how to help learners overcome cognitive, linguistic, and intellectual barriers and that major attention should be spent on reading and making sense of texts rather than answering particular types of questions about texts. Kyle (2018) emphasised that learning strategies before and during reading can help Deaf learners overcome challenges that they face when gaining access to and attempting to understand text.

Participants proposed simplifying and illustrating the story as significant strategies for teaching reading skills to Deaf learners, as this had a positive impact on the comprehension of all learners examined. Based on this, T1 and T3 recommended adding visuals to texts to support reading comprehension skills among learners who are deaf. Dudley (2023) argue that social constructivism, suggests that learning and learning problems are rooted with the context of human interactions and relationships a learning challenge, for example, is not a reflection of the learner's malfunction, but rather is evident when the learning activities and environment, including the teaching, do not sufficiently support the learner in such a way as to facilitate successful learning.

T2 revealed a positive correlation between added visuals and reading comprehension and indicated that learners appreciated the use of visual resources. Gentry, Chinn and Moulton (2020) highlighted that the use of pictures is a powerful factor in the transfer of factual information during the reading process. Girgin (2023) pointed out that shared reading can be useful for developing reading skills among Deaf learners and provided

guidelines for applying the strategy. Furthermore, the participants highlighted that shared reading was more applicable and effective among Deaf learners when teachers determined learners' language levels beforehand and summarised the text for learners if needed. In addition, the stories within the text should be engaging and include repetitive elements to facilitate reading and support learners' comprehension.

Teaching reading to deaf learners showed that mental preparation is important before exposing Deaf learners to reading tasks. Thus, teachers need to activate and enhance learners' prior knowledge before they start reading. In addition, teachers need to ask learners to take notes in visual form and draw illustrations and diagrams to go along with what they are reading. Participants stated that teachers could encourage learners to work with a partner to act out a particular scene or build a model to help envision texts and ask each other questions and debate the text as they move through it (Crume, Lederberg & Schick, 2021).

T3 revealed that after mastering SL, teachers are advised to use picture books that make learners link signs and pictures representing words. In addition, T3 advised teachers to consolidate the above technique that she suggested with the use of letter cards by demonstrating how individual letters form words. Lastly, teachers need to build learners' vocabulary through introducing new vocabulary daily and using it in conversations as well as displaying it on a wall next to a picture of its signed letters. Similarly, T2 suggested introducing the cover of the book and fingerspelling and signing the title, author, and illustrator to build reading skills among Deaf learners. (Schleper, 2019) argued that teachers should discuss what the book is about, show the pictures and print, and encourage learners to talk about the book while reading. After reading, teachers should help learners connect the concepts in the book to the real world.

5.4 LIMITATIONS OF THE STUDY

The main limitation of this study was the language barrier as there was potential for misinterpretation. Furthermore, another limitation was time due to teachers preparing learners for their continuous assessment.

5.5 RECOMMENDATIONS

It is crucial that all educators and education managers receive appropriate training, “The primary demands of an inclusive system will necessitate a major focus, at least initially, on the training, re-training and re-orientation of all personnel” (DoE, 2002:14). In order for educators and education managers to support each other as well as their learners, they need new skills in curriculum differentiation, curriculum assessment, assessment of potential, collaborative teaching and learning, collaborative planning and sharing, reflection on practices and co-operation” (DoE, 2002:65).

The data from this study suggests that the Deaf learners at South African schools need better academic preparation. Schools for the Deaf should include transition programmes as part of every Deaf Learner’s Individual Support Plan (ISP). These transition programmes should promote academic development of learners who are deaf and not overlook the importance of literacy development. As mentioned before, in this study, it is of paramount importance for the Deaf learner to learn the spoken language for reading, in order to facilitate integration into the hearing world.

The study set out to determine how reading was taught to Deaf learners. Apart from the main findings of the study, other related concerns that affect the teaching/learning processes, and that require attention, were revealed. The recommendations are highlighted as follows:

- National and provincial consultations, workshops, further training with regard to implementation strategies of new policies with regard to SASL, bilingual education, literacy development are needed. This requires “full consultation with Department of Education (National and Provincial), learners, the adult Deaf community, principals and teachers at schools for the Deaf, teacher unions, parents of Deaf learners and other interested parties” (UNESCO, 1999:27).
- In-service training (INSET) is needed for both education managers and educators in the uses of SASL. Learners in teacher training institutions wishing to educate Deaf learners need to be provided with SASL skills before entering schools for the Deaf at a pre-service (PRESET) level.

- Within an inclusive education system, teachers who educate Deaf learners with a disability such as a physical disability need to receive adequate training and support in order to best accommodate the learner.
- The Curriculum Development Centre subject specialists should introduce the use of pictorial books with signs.
- Schools to explore the use of reading equipment, such as projectors when teaching Deaf learners. This is where the teacher displays a sign that the learners need to learn to represent a word.
- Schools for the Deaf need to be given training and support with regards to issues such as HIV/AIDS, bereavement, confidentiality, First Aid, drugs, rape and abuse from organisations such as the Department of Social Services, Welfare and NGOs. This is in order to empower and equip educators so that they can assist Deaf learners in challenging situations.
- Compulsory SL training should be provided in all schools for the Deaf and be run by competent Deaf adults who have undergone training.
- Special learning resources need to be developed to help Deaf learners engage in reading for comprehension activities with less difficulty. These resources should be those beyond the normal learning resources.

5.6 RECOMMENDATIONS FOR FURTHER RESEARCH

The following recommendations are made for further research:

- Research is needed to explore the effectiveness of inclusive education strategies for Deaf learners who also have additional disabilities, such as physical impairments. This includes investigating the specific training needs of teachers, the support mechanisms required, and the overall impact on the learning outcomes and well-being of these students.
- Further studies should be conducted to evaluate the impact of using pictorial books and technological tools, such as projectors, in teaching Deaf learners. This research should focus on how these tools can enhance literacy development, improve comprehension skills, and overall engagement in the learning process.
- Research should investigate the design and effectiveness of comprehensive training programmes for educators in Deaf schools on issues such as HIV/AIDS,

bereavement, confidentiality, First Aid, drugs, rape, and abuse. The aim would be to assess how well these programs prepare educators to support Deaf learners in dealing with these challenges, and to identify best practices for such training initiatives.

5.7 CONCLUSION

Chapter 5 presented the summary, conclusion and recommendations of the study. Deaf learners often struggle with reading comprehension skills. They also have unique needs as their first language is visual instead of auditory. When teaching deaf, it is important to be informed about which strategies can be used in the classroom in order to support the reading comprehension skills of these learners. The study also revealed that there are inadequate instructions and teaching resources to sufficiently teach reading to Deaf learners to meet demands of new initiatives. This should also include specialised guidelines from the curriculum development specialists. Identifying effective strategies for developing reading skills among Deaf learners can be challenging, as it may be difficult to determine specific strategies for various areas and circumstances. Thus, multiple teaching strategies are required to accommodate the various learning needs of learners. Teachers should understand the learning needs and learning styles of the Deaf learners in their class when choosing strategies.

If schools for the Deaf follow the principles of an inclusive education system, and prevent barriers to learning and development, these schools may “celebrate diversity through recognising potential, increasing participation, overcoming and reducing barriers, and removing stigmatisation and labelling” (DoE, 2002:41). This will result in schools for the Deaf being the most appropriate, least restrictive, barrier-free education system for Deaf learners in South Africa where Deaf learners once leaving these schools, will be productive members of South African society.

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APPENDICES

APPENDIX A: ETHICAL CLEARANCE

UNIVERSITY OF THE
FREE STATE
UNIVERSITEIT VAN DIE
VRYSTAAT
YUNIVESITHI YA
FREISTATA



GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)

12-Apr-2024

Dear Ms Luyanda Mashige

Application Approved

Research Project Title:

EXPLORING GRADE 1 TEACHERS' EXPERIENCES WITH TEACHING READING TO DEAF LEARNERS IN SPECIAL SCHOOLS.

Ethical Clearance number:

UFS-HSD2023/2556

We are pleased to inform you that your application for ethical clearance has been approved. Your ethical clearance is valid for twelve (12) months from the date of issue. We request that any changes that may take place during the course of your study/research project be submitted via an Amendment on RIMS to the ethics office to ensure ethical transparency. Furthermore, you are requested to submit a Final Report on RIMS for your study/research project to the ethics office once the project has concluded. Should you require more time than the allotted 12 months to complete this research, please apply for an extension by submitting a Continuation/Report on RIMS. Thank you for submitting your proposal for ethical clearance. We wish you success with your research.

Yours sincerely,

Dr Sean van der Merwe

Vice-Chairperson: General/Human Research Ethics Committee

Digitally signed by Sean van der Merwe
Date: 2024.04.12 17:30:27 +02'00'

205 Nelson Mandela P.O. Box 339
Drive
Park West
Bloemfontein 9301
South Africa
Tel: +27 (0)51 401
3770
VandermeweS@ufs.ac.za
www.ufs.ac.za



APPENDIX B: PERMISSION FROM THE GAUTENG DEPARTMENT OF EDUCATION



GAUTENG PROVINCE

Department: Education
REPUBLIC OF SOUTH AFRICA

8/4/4/1/2

GDE RESEARCH APPROVAL LETTER

Date:	02 April 2024
Validity of Research Approval:	08 February 2024– 30 September 2024 2024/08
Name of Researcher:	Mashige L.
Address of Researcher:	13677 Sol plaatjie Crescent Kagiso Ext 8
Telephone Number:	079 605 6932
Email address:	2017088291@ufs4life.ac.za
Research Topic:	Exploring grade 1 teachers' experiences with teaching reading to deaf learners in special schools
Name of University:	University Of The Free State
Type of qualification	Masters
Number and type of schools:	LSEN Schools
District/s/HO	Gauteng West, Tshwane South

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

Making education a societal priority

Office of the Director: Education Research and Knowledge Management

7th Floor, 17 Simmonds Street, Johannesburg, 2001

Tel: (011) 355 0488

Email: Faith.Tshabalala@gauteng.gov.za

Website: www.education.gpg.gov.za

1. Letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.
2. The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.
3. **Because of the relaxation of COVID 19 regulations researchers can collect data online, telephonically, physically access schools or may make arrangements for Zoom with the school Principal. Requests for such arrangements should be submitted to the GDE Education Research and Knowledge Management directorate.**
4. **The Researchers are advised to wear a mask at all times, Social distance at all times, Provide a vaccination certificate or negative COVID-19 test, not older than 72 hours, and Sanitise frequently.**
5. A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.
6. A letter / document that outline the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.
7. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.
8. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.
9. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.
10. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
11. It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.
12. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
13. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.
14. On completion of the study the researcher/s must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.
15. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.
16. Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards



Dr. Gurnani Mukatuni

Acting CES: Education Research and Knowledge Management

DATE: 02/04/2024

2

Making education a societal priority

Office of the Director: Education Research and Knowledge Management

7th Floor, 17 Simmonds Street, Johannesburg, 2001

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APPENDIX C: LETTERS TO THE SCHOOL PRINCIPALS AND SCHOOL GOVERNING BODIES

Letter to school principal

The School Principal

Redacted for confidentiality

Dear Principal

Subject: Request for permission and access to conduct educational research at
[redacted] for The Deaf

I am Luyanda Mashige a full time registered Master's student at the University of the free state (student No: 2017088291). I hereby humbly request for permission to conduct a research study at [redacted] for The Deaf.

My research topic of study is: Exploring grade 1 teachers' experiences with teaching reading to deaf learners in special schools.

I would like to assure your office that, should I be granted permission, the research ethics will be applied at all times when carrying out my research. The identity of each participant, their views and contributions, the school, will be treated with a high degree of confidentiality and anonymity.

Your humble understanding in this regard will be highly appreciated and I look forward to hearing from you through completion of the template at the bottom of this page.

Yours' sincerely

Mashige Luyanda

DECLARATION

I the Principal of for The Deaf hereby grant permission to the researcher to conduct her research in my school.

Name.....

Signature.....

Date.....

Letter to the School's Governing Body

The School Governing Body

Subject: Request for permission and access to conduct educational research at
 for The Deaf.

I am Luyanda Mashige a full time registered Master's student at the University of the free state (student No: 2017088291). I hereby humbly request for permission to conduct a research study at for The Deaf.

My research topic of study is: Exploring grade 1 teachers' experiences with teaching reading to deaf learners in special schools.

For further information on this research you may contact my supervisor, Dr Blanche Ntombizodwa Ndlovu, NdlovuBN@ufs.ac.za as well as Luyanda Mashige 2017088291@ufs4life.ac.za.

Your cooperation to this regard will be highly appreciated.

Yours sincerely

Mashige Luyanda

Letter to school principal

The School Principal

Redacted for confidentiality

Dear Principal

Subject: Request for permission and access to conduct educational research at
[redacted] for the Deaf.

I am Luyanda Mashige a full time registered Master's student at the University of the free state (student No: 2017088291). I hereby humbly request for permission to conduct a research study at [redacted] for the Deaf.

My research topic of study is: Exploring grade 1 teachers' experiences with teaching reading to deaf learners in special schools.

I would like to assure your office that, should I be granted permission, the research ethics will be applied at all times when carrying out my research. The identity of each participant, their views and contributions, the school, will be treated with a high degree of confidentiality and anonymity.

Your humble understanding in this regard will be highly appreciated and I look forward to hearing from you through completion of the template at the bottom of this page.

Yours' sincerely

Mashige Luyanda

.....
Declaration

I the Principal of [redacted] for the Deaf hereby grant permission to the researcher to conduct her research in my school.

Name.....

Signature.....

Date.....

Letter to the School's Governing Body

The School Governing Body

Subject: Request for permission and access to conduct educational research at
 for the Deaf.

I am Luyanda Mashige a full time registered Master's student at the University of the free state (student No: 2017088291). I hereby humbly request for permission to conduct a research study at for the Deaf.

My research topic of study is: Exploring grade 1 teachers' experiences with teaching reading to deaf learners in special schools.

For further information on this research you may contact my supervisor, Dr Blanche Ntombizodwa Ndlovu, NdlovuBN@ufs.ac.za as well as Luyanda Mashige 2017088291@ufs4life.ac.za.

Your cooperation to this regard will be highly appreciated.

Yours sincerely

Mashige Luyanda

APPENDIX D: INFORMED CONSENT

Letters to the research-participants in the Grade 1 participating in the study

Dear Participant/ Teacher

RE: REQUEST FOR YOUR CONSENT TO PARTICIPATE IN THIS STUDY

I am Luyanda Mashige a full time registered Master's student at the University of the free state (student No: 2017088291).

I hereby seek permission from you to be part of my study. My research study topic is: *Exploring grade 1 teachers' experiences with teaching reading to deaf learners in special schools.*

If you kindly accept to participate in this study, the following will happen:

Each participant/teacher will be invited to participate in a semi-structured interview, which will take place at a time that is convenient for each participant.

Participants/teachers will be observed teaching reading to deaf learners in the classroom for 20-30 minutes.

Your participation in this research study is completely voluntary and you can withdraw at any time you wish to do so. The identity of each participant, their views and contributions will be treated with high degree of confidentiality and anonymity.

Yours sincerely

Mashige Luyanda

.....

CONSENT FORM/LETTER FOR THE PARTICIPANTS

I agree to participate in the research on condition that I can withdraw at any time.

Name:

Signature:

Contact number:

Date:

APPENDIX E: INTERVIEW GUIDE

Semi-structured interview questions

what are Grade 1 teachers' experiences with teaching reading to deaf learners in special schools?

1. How many years have you been teaching?
2. What do you do to create a good classroom for all deaf learners?
3. How do grade one teachers teach reading to deaf learners?
4. What strategies can be used to successfully support the development or improvement of reading to deaf learners?
5. What kind of support from teachers do deaf learners with reading problems need?
6. What materials, equipment etc. do you use when you are teaching deaf learners to read?
7. What challenges do you face when teaching deaf learners how to read?
8. Why do grade 1 teachers' experience difficulties when teaching reading to deaf learners?
9. What kind of support do teachers need to help deaf learners read in the classroom?

APPENDIX F: OBSERVATION GUIDE

The following will be observed:

- Seating Arrangement
- Number of learners in the classroom
- Behaviour of learners
- How many desks in the classroom?
- Teacher's Table
- What kinds of LTSM's were used by the teachers (charts, chalkboard, chalks, learners 'exercise books/ journals, abacus, counters.
- Are learners given books to read
- The interactions between the teacher and the learners, do they understand each other.
- Do the learners understand the teacher when teaching using sign language?
- Classroom organisation
- Learner-Teacher Support Material (Resources) used

APPENDIX G: TURNITIN REPORT

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EXPLORING GRADE 1 TEACHERS' EXPERIENCES WITH TEACHING READING TO DEAF LEARNERS IN SPECIAL SCHOOLS. BY MASHIGE LUYANDA 2017088291 A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF EDUCATION IN "EARLY CHILDHOOD DEVELOPMENT AND LEARNING OF THE UNIVERSITY OF THE FREE STATE

BLOEMFONTEIN, SOUTH AFRICA DR BN NDLOVU PROMOTER" ***** 2024 SUMMARY The purpose of this study was to investigate the difficulties teachers faced when instructing deaf students in grade one in reading. The following goals served as the study's guidelines: examining the methods used by first grade instructors at special schools to teach deaf students to read. Determine the difficulties that first grade instructors encounter when instructing deaf students in reading, as well as the methods that they employ. According to the findings, deaf students who are learning to read must be exposed to educational materials that are tailored to their specific requirements. These should be unique resources

that go above and beyond what is often provided in a typical reading class. It is clear that teachers must teach reading to deaf learners in order to prepare deaf students for success by changing the way they educate to better facilitate learning. Many recommendations have been made based on the study's findings, one of which is that deaf students studying reading for comprehension should be exposed to learning materials that are tailored to their specific needs. These should be unique resources that go above and beyond what is often provided in a typical reading class. It is clear that teachers must modify their teaching strategies to better assist the learning of deaf students in order to set them up for success when teaching reading to them. Additionally, in-service training in the use of South African Sign Language is required for educators and education managers. Before entering teacher training programs, students who want to work with Deaf students must be proficient in South African Sign Language enrolling in pre-service schools for the Deaf. Key words: Foundation Phase teachers, Deaf learners, Inclusive Education, Reading, South African Sign Language and social constructivism

A list of figures Table 4.1 Biographical characteristics of participants Table 4.2 Themes that emerged from the study Figure 2.1: Lev Vygotsky values of social constructivism. Figure 4.1: Possible Classroom Arrangement

CHAPTER 1 ORIENTATION TO STUDY

1.1 Introduction

Deaf students frequently have difficulty acquiring or advancing in critical literacy skills. Reading is one of the hardest skills for children to acquire. Van Staden (2023) states that "it is necessary to identify reading difficulties and implement effective reading support strategies in this population, as the reading skills of many deaf learners lag several years behind those of hearing children. Without spoken language skills that are adequate for their age, deaf learners find it difficult and take longer to acquire reading literacy (Musselman, 2020). It is possible to use letter-to-sound correspondences as the basis for phonological decoding if one has access to auditory information. Deaf learners have difficulty with language skills like syntax and grammar, which affect their comprehension of sentences, as well as basic skills like phonology and decoding, which affect their ability to recognize words (Kyle & Harris, 2021).

1.2 Background of the study

The largest difficulty in South Africa is teaching deaf kids to read (Shenton, 2021). A comparable international evaluation that monitors students' reading progress worldwide is called the Progress in International Reading Literacy Study (PIRLS). "Since 2001, PIRLS has been conducted every five years. In all four PIRLS reviews (2001, 2006, 2011 and 2016), South Africa was involved. In every assessment, South African students did worse than the average". "Deaf learners generally have difficulty learning basic literacy skills and/or developing reading comprehension beyond elementary school. Reading comprehension is a continuous worry for deaf learners, according to Benedict, Rivera, and Antia (2019), which emphasizes how crucial the subject of reading is. There has been relatively little progress in improving narrative comprehension in deaf readers despite decades of research," according to Sullivan and Oakhill (2020), indicating the need for more study on this subject. According to the white paper published by the South African Department of Education in 2002, students who face the greatest obstacles to their education may be eligible for special schools. Furthermore, rather than a barrier of "severe challenge, the majority of Deaf persons view linguistic barriers as their main obstacle to schooling. Makola (2021) claims that the implementation of White Paper 6 has proceeded too slowly. When the White Paper was first released in 2001, it had a 20-year implementation plan that called for the creation and operation of an inclusive educational system by 2021. Little progress has been made. Motala (2018) asserts that speech and communication are distinct from literacy and language. Language development must occur before speech development. However, linguistic and reading proficiency cannot be ensured by only listening to early speech development. Shukla and Agrawal (2019) contend that reading is the foundation of all learning and that a learner's capacity to grow as a person depends on how well they can read. Literacy includes speaking, writing, listening, and reading. In order for students to engage with written language in their daily lives, reading is a must. According to Arndt and Lieberman (2020), early book exposure helps children build their vocabulary and linguistic skills. Reading is also a crucial component of a learner's growth. One reason why learning issues may go undiagnosed for a long time is that there isn't a set list of symptoms that all children will experience (Cornes and Napier, 2015). This study examines several tactics that educators might be applied with deaf students to encourage the growth of proficient reading abilities.

1.3 problem statement

"Most deaf students struggle to advance past the foundational reading level and acquire critical reading skills. Reading is a continual source of anxiety for deaf students. In South Africa, students with hearing impairments consistently perform below average in the majority of academic subjects. The way students perform in courses where they must read a lot in order to understand written assignments demonstrates how seriously they take reading comprehension assignments. Unfortunately for them, every subject that can be tested and is intended for deaf learners is provided in English, which means that you have to read. The benefits of early reading success and the dire repercussions of early reading failure are becoming increasingly apparent to the public nationwide (DoE, 2002). Recent evaluation tests have revealed that

South African students' academic achievement is unacceptably low. Studies on the academic performance of deaf learners frequently reveal that, on numerous measures and in a wide range of subjects, the performance of many learners in this demographic is markedly lower than that of their usual hearing classmates (Hoffman and Wang, 2020). The statement made by Sullivan and Oakhill (2018) that despite decades of research, there has been relatively little progress in improving the ability to read to deaf learners indicates the need for more study on this subject. Regrettably, according to Nikolaraz, Vekiri, and Easterbrooks (2019), improving the reading comprehension performance of their learners is one of the major challenging tasks of educators of deaf learners. A contributing factor in this difficulty is that deaf students frequently do not comprehend that reading is about more than just reading words (Benedict, Rivera, & Antia, 2015)". "My aim in doing this research is to investigate the difficulties that first-grade instructors encounter when attempting to help deaf students learn to read in a classroom setting. Unlike their hearing peers, deaf learners suffer in the secondary grades, throughout their college careers, and in the post-high school job market due to their lack of literacy abilities. Research on the academic achievement of deaf learners frequently reveals that the performance of many members of this demographic is markedly lower than that of their usual hearing classmates on a wide range of measures and areas (Hoffman and Wang, 2020).

1.4 RESEARCH AIM AND OBJECTIVES This study seeks to explore Grade 1 teachers' experiences with the teaching of reading to deaf learners in special schools.

1.5.2 Research Objectives

- Explore how Grade 1 teachers teach reading to deaf learner's in special schools".
- Establish the challenges Grade 1 teachers experience when teaching special needs learners".
- "Determine the strategies Grade 1 teachers experience when teaching special needs learners"

1.5 Research questions The main research question for this study is: what are grade 1 teachers' experiences with teaching reading to deaf learners in special schools"? Sub-questions

- How do grade one

- teachers teach reading to deaf learners? What challenges do teachers face when teaching reading to deaf learners?
- What strategies can be used to successfully support the development or improvement of reading to deaf learners?
- Why do grade 1 teachers' experience difficulties when teaching reading to deaf learner's?

1.7 Chapter summary This chapter provides background information and an introduction to the study on how grade one teachers teaches reading to deaf learners. It was followed by the problem statement and rationale for the study. The parts that followed included the aims, objectives, and research questions. The scope and significance of the study followed. Operational concepts, such as deaf, reading and inclusive education were defined. The preliminary literature review and the conceptual and theoretical framework were discussed in Section 1.9. Section 1.10 addressed the research design and methodology, whereas Section 1.11 addressed ethical considerations. The chapter's arrangement of chapters came to an end here".

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction 'It is crucial to evaluate the most recent studies on this subject in order to comprehend and investigate how deaf learners acquire reading skills. The background, research topic, objectives, and significance of the study were briefly covered in the introduction of the previous chapter. The purpose of this chapter is to give a summary of the findings of previous researchers regarding the experiences of teachers instructing deaf students in special education programs in reading. This literature review will examine four themes. The first themes center on how deaf students acquire their reading skills. The second subject focusses on how first-grade teachers instruct deaf students in reading. The third theme focusses on methods that have been applied to help deaf students improve their literacy, particularly in reading. In an effort to bring deaf students' reading abilities up to pace with those of their hearing classmates, a variety of tactics have been tried in classroom settings. Furthermore, following the intervention time frames, some of those tactics helped the learner's reading skills increase successfully, while others showed no change in the learner's abilities. The fourth subject will list the various obstacles that deaf students face when trying to read. It is crucial to investigate the precise effects that phonology and vocabulary knowledge have on reading because these two skills are crucial to reading. Understanding how first-grade instructors instruct deaf students in reading in special schools is made possible by the discussion in this chapter. A literature review is a piece of academic writing demonstrating knowledge and understanding of the academic literature on a specific topic placed in context, according to Rudestam and Newton (2020). Thus, a literature review is crucial to study because it helps determine the impact of new information, evaluates current literature, and finds sources of conflicts between different concepts.

2.2 Challenges of Teaching Reading to Deaf Learners Numerous academics have carried out research on the difficulties teachers face when instructing deaf students in reading, some of which this study has brought to light. According to Marschark (2019), deaf students' reading achievement usually fell well short of that of their hearing contemporaries. Difficulties understanding sign language, similar to how the texts indicated that the deaf learners' problems reading from the text could involve more than just reading". A

number of issues have been identified as influencing the literacy development of deaf learners, including difficulties with phonemic awareness (Harris & Beech, 2020), vocabulary, grammar, the application of prior information, and metacognitive skills (Jackson, Paul, & Smith, 2017). This showed that a large number of deaf students appeared to have "difficulties with both low-level and high-level reading skills (Kelly, 2022). Loeterman, Paul and Donahue (2020) also believed that for any instructional reading program to be effective, it needed to address the development of skills such as word identification, word knowledge, and comprehension". Marschark (2019), however, claimed that there was much that was not known about the deaf learners reading. To him the lack of progress in promoting deaf learners reading achievement was largely the cause of the wrong directions taken. He strongly believed that the challenges in educating learners who are deaf usually ascribed to reading were not literacy-related at all. He observed that learners who were deaf made the same kind of mistakes in reading and writing as those made by people learning English as a second language. This observation was however on learners of a higher grade. It remains to be investigated whether the same pattern would be applicable to the learners who are deaf and are at the primary school level. Eisenbraun (2021) noted that "deaf learners used many communication approaches and this had instructional implications. Some of these learners unfortunately were in classes where the teachers didn't know sign language, and a sign language interpreter had to be brought into the classes to provide sign language interpretation. Berke (2018) also observed that there is no consensus among researchers, educators, parents, or those who are deaf or hard of hearing about the best reading strategies for learners who are deaf or hard of hearing. Chamberlain (2019) argued that reading development is contingent on a fully developed primary language, and that incomplete or inconsistent signed or spoken language may affect the development of reading proficiency. Luckner, 2017 notes that deaf learners have significant difficulties in comprehending written text. This is mainly due to the hearing loss that prevents them from being exposed to oral language when they were an infant. However, it is also due to the type of educational intervention they are faced with, which accustoms them to decoding single words and isolated sentences, rather than entire texts. Vocabulary and Phonology have always been sources of difficulty for deaf learner's. In regards to their reading skills, vocabulary and phonology tend to be two areas that contribute to the lack of comprehension when deaf learners are reading. Daza and Philips-Silver, (2014) report that some studies have indicated a strong correlation between vocabulary knowledge and reading comprehension in deaf learners. An additional challenge for deaf learners is the way they learn vocabulary. Wauters, Van Bon, (2019) state that "Reading words that are thought to be learned linguistically takes longer than reading words that are thought to be learned through perception". Since deaf learners tend to learn their words visually (through perception), it makes the task of acquiring vocabulary extremely difficult for them. In regards 12 to phonology Miller (2020) states: Factors considered central for explaining the reading process in hearing readers –such as phonemic awareness and phonological coding- have also been targeted in attempts to illuminate the origins of the impoverished reading skills of deaf learners According to Kunisue (2017), "The ability to comprehend abstract words and ideas are essential in the development of academic language skills deaf learners"). Abstract, multi- meaning words, and figurative language are especially difficult for deaf learners. This theory can be supported by Aceti and Wang (2020) who stated that a majority of vocabulary deficiency in deaf learners comes from their limited access to multi-meaning words. Typically, this lack of vocabulary is considered by many educators to be at least a portion of the problem when it comes to the comprehension of sentences or passages read by deaf learners (Kunisue, 2017). Giang and Inho (2018) state one possible reason for the persistence of the reading deficits of deaf learners is a dearth of knowledge of the world; another is insufficient development of metacognitive skills (e.g., the ability to infer information that is not explicitly stated in a text or the ability to understand figurative language). This study by Giang and Inho (2018) indicates yet another area of language that deaf learners struggle with, in addition to abstract words and multi-meaning words. Based on the literature, vocabulary (sight words, abstract words, multi- meaning words, and figurative language) is definitely an area that impacts the reading skill for deaf learners (Kelly

,2021) 2.3 Strategies to support the development of reading to deaf learners "This section will highlight some of the approaches and methods that can be developed to other approaches/methods of teaching

reading. The earlier approaches taken advantage of including use of the Sign language, Total Communication and Bilingualism. Teaching strategies refer to the methods, techniques, procedures and processes that a teacher uses during instruction (Hattie, 2019). It is generally recognised that teaching strategies are multidimensional and their effectiveness depends on the context in which they are applied." "The teaching of reading to the deaf learners is constantly being transformed through the increased interest and several studies carried out on the subject. Reubell (2018) observed that

the “deaf use an alternative pathway, specific to reading, not used by people who hear. It will however be noted that reading to deaf learners (an approach that has its base in the bi-lingual approaches) has been observed to be instrumental in the teaching of reading to the deaf. The belief is that the simple most important activities for building the knowledge required for eventual success is reading aloud to children (Schleper,2016). The methodology advances ‘the following specific tasks to be observed by the reader: deaf reader translates stories, keep both languages viable, not constrained by text re-read stories or storytelling and reading continuously, follow child’s lead, make what is implied explicit, adjust signing style to fit story, connect concepts in the story to read, use attention maintenance strategies, use eye gaze to elicit participation, engage in role play to extend concepts, use variations to sign repetitive English phrases, users provide a positive and re-enforcing environment and expect the child to become literate (Harris & Beech, 2020). However, it is challenging as some learners could be profoundly deaf’. Other modern variations include fingerspelling which relies on the use of the Manual Alphabet. Some allow signing (a basic ingredient of sign language) as auxiliary mode (commonly learnt as the sign supported approaches) while others engage the pure oral approaches which forbid the use of any manual communication (Schleper,2016). In such cases cochlear implants are used as an integral part of the oral based program. The use of Phonics (that has its roots in oralism); one other approach, focuses on hearing to parent connections between sounds and the words and understand how it looks like when written. Alternatively, one would use the whole language approach that focuses on seeing the learner learn to read first, followed by how to say and spell the words”. Puente, Alvarado and Valmaseda (2019) observed that the teaching/learning methodologies for teaching the deaf first engaged the oral and written bilingualism. These modes were characterized by attributes such as signed speech which were used to complement and reinforce spoken communication, finger spelling used as a support strategy in reading, sign language and cued speech. Gates & Chase (2019) observed that the deaf learn spelling by use and perception of visual forms. Likewise, the teachers could use the manipulative Visual Language tool, to help children visualize sounds they can’t hear (Berke, 2018). It naturally follows that guided reading for the deaf and hard of hearing children, would hence highly be dependent upon the effectiveness of the teacher/teaching processes. Multiple different strategies have been tested in classrooms with deaf learners with the goal of increasing their reading skills to a level comparative with their hearing peers. In other words, it is the duty of educators of the deaf to identify their learners needs and explore strategies to help them improve their reading skills. In agreement, Dimling (2020) states that “intense, targeted interventions that use evidence based approaches are imperative for learners with a disability such as hearing loss to minimize its impact and maximize language development. These concepts are all good reasons to regard the research of reading strategies that can support deaf learners as extremely important for educators. Miller (2019) conducted research regarding reading comprehension and its relation to the amount of functional deaf learner may have, and when his finding did not confirm his hypothesis, one thing he stated was that focusing on reading strategies of individuals with hearing loss may be a more fruitful approach to understanding the underlying causes of their reading problem. Dimling (2020) investigated a non-visual reading strategy to help deaf learners improve their reading skills through a vocabulary intervention. For six to eight weeks, six learners took part in a 30 minutes’ intervention to determine what effects vocabulary intervention would have on word recognition, production, and comprehension. Each week the learners learned 12 new vocabulary words using three components: word introduction, word activities, and practice. Dimling described her findings as The results of the present study suggest that a vocabulary intervention grounded in conceptual emphasis can substantially and positively affect learners’ vocabulary knowledge. This study suggests that vocabulary has an impact on reading comprehension for deaf. While Daza and Lopez (2018) did not do their research on an intervention strategy, the findings from their study support Dimlings findings. Their study investigated the language skills (including vocabulary) and reading comprehension in deaf learner’s. They stated that vocabulary knowledge may be notably significant in the area of developing reading skill. Based on both studies we can conclude that vocabulary plays a vital role in the reading skills of deaf learners. van Staden (2023) took a different approach when researching the strategies that can be used to support reading to deaf learners. She investigated the use of a balanced literacy approach with the addition of multi-sensory coding strategies as well as reading scaffolding to increase the reading skills in a group of 64 Deaf learners ranging in age of six to 11. The group was split at random and while one group received regular classroom instruction, the other group received the intervention strategies. Pre-intervention, there were no major differences in the groups’ scores on the nine assessments that were administered. The intervention was conducted over a period of nine months and the post-intervention results showed that there was a large increase in reading and vocabulary skills of the deaf learners who participated in the balanced reading approach intervention. In comparison, the

group of learners who received usual classroom instruction did not exhibit the same kind of gains in their reading and vocabulary skills (van Staden, 2023). These results indicate a positive correlation between the intervention and the reading skills of the Deaf learners involved in the intervention. van Staden states The results show that following a 9-month intervention of balanced reading instruction techniques, profoundly deaf signing foundation phase learners had demonstrated a significant improvement in reading when compared to a control group who received the usual classroom instruction" as well as the findings demonstrate that the benefits of following a whole language approach embedded in bilingualism only were marginal for the control group. These results indicate that in order to support Deaf learners in reading and comprehension, a balanced literacy approach should be embraced in the classrooms. The teacher's role "is to assist the learners in developing fluency, confidence, and insights into themes, styles, divergent opinions, and various forms of literature; while invoking their responses based on their own thoughts, feelings and opinions about the reading process. The teachers have to engage in guiding the learners to discuss and explore the reading process, so that the learners can develop literacy skills which they could later apply to what they learn; when they read and write independently (Laurent Clerk National Deaf Education Centre, 2021).

2.7 THEORETICAL FRAMEWORK

A theoretical framework in a research study, according to Omirin and Falola (2021), is the framework that supports and directs a study's theory. In other words, a theoretical framework is an effort to create a broad explanation for a certain phenomenon. In a similar way Swart and Pettipher (2021), defines theoretical framework as collection of ideas that are logically arranged to help us understand the world and ourselves. The social constructivism theoretical framework was applied in this study. Lev Vygotsky first proposed the social constructivism theory of learning in 1968. According to the theory, language and culture serve as the frameworks through which people interact with one another, perceive their surroundings, and comprehend it. Language and culture, in Vygotsky's view, are crucial to both the intellectual growth of people and how they view the world". "This means that concepts are transmitted through language and understood through experience and interactions in a cultural context. Knowledge is not just socially constructed; it is also jointly constructed because it takes a group of people to have a shared language and cultural heritage. The connection here is that, whereas the constructivist views knowledge as something learners independently construct based on the experiences they gather from their environment, the social constructivist views knowledge as something learners collaborate on with peers, teachers, and other students." According to Vygotsky, "social learning promotes cognitive development throughout one's lifetime. In other words, learners can complete any learning task, no matter how challenging, with the help of an adult or a group of their peers. This theory supports the development of opportunities for learner's collaboration with the instructor and peers in the creation of knowledge and understanding". Kapur (2018) "noted that the social construction of knowledge occurs in a variety of contexts and ways". "It could be accomplished through group discussions, teamwork, or any type of educational interaction in a place of worship, on social media, or in the marketplace. Students gain the knowledge and experience necessary for leading fulfilling lives as they engage with others and their surroundings, both material and immaterial". "In social constructivism human interests are important for research purposes and knowledge is constructed through social interaction Such knowledge is shared rather than an individual experience(Gergen,2019). According to Hermans (2021) Constructivism implies that reality is constructed through human interaction, knowledge is a human product and is socially and culturally constructed. Individuals create meaning through their interactions with each other and with the environment in which they live. Social constructivism emphasises the importance of culture and context in the process of knowledge construction and accumulation. Social constructivism impacts strongly on the way in which people learn. Learners add to and reshape their mental models of reality through social collaboration, building new understandings as they actively engage in learning experiences (Khalifa, 2019). In addition, Scaffolding, i.e. guidance and support, plays an important role in the learning process. The fundamental art that directs the management and delivery of lessons in the classroom can also be said to be teaching methods. In order to encourage learning in the students, Dorgu (2015) defines teaching method as the strategy by which a teacher communicates his or her subject matter to the learner in accordance with predetermined instructional objectives. According to Westwood (2018), a teaching method is made up of the guidelines and techniques that instructors employ to promote student learning. These definitions make clear that there are rules and procedures for teaching that are designed to maximize students' learning. These guidelines and procedures are based on learning theories like social constructivism".

Figure 2.1: Lev Vygotsky values of social constructivism

Figure 2.1: Lev Vygotsky values of social constructivism. Diagram by: Laura Lohman (2023). "To understand Vygotsky's work, two key principles must be understood: The More Knowledgeable Other (MKO) and the Zone of Proximal Development (ZPD). The MKO is self-explanatory; it refers to someone who understands or has a higher ability level than the learner in relation

to a specific task, process, or concept. Although the implication is that the MKO is a teacher or an elderly person, this is not always true. Many times, a child's peers or an adult's children will have more knowledge or experience. The key to MKOs is that they must have (or be programmed with) more knowledge about the topic being learned than the learner. The concept of the More Knowledgeable Other is inextricably linked to Vygotsky's second major principle, the Zone of Proximal Development. The MKO and ZPD, when combined, form the foundation of the scaffolding component of the cognitive apprenticeship model of instruction. This study, however, will concentrate on the zone of proximal." "The ZPD is defined by Vygotsky (1978) as the difference between actual developmental level as determined by independent problem solving and potential developmental level as determined by problem-solving under adult guidance or in collaboration with more capable peers. Vygotsky believed that when a student arrived at the ZPD for a specific task, providing the necessary assistance (scaffolding) would provide the student with enough of a "boost" to complete the task. Once the student has mastered the task while using scaffolding, the scaffolding can be removed and the student will be able to complete the task on his own. Vygotsky's Zone of Proximal Development (ZPD) concept appeared to focus more on interactions involving schooling and academic learning". His point of view appears to be that 18 "the ideal role of the teacher is to provide scaffolding as a means of assisting learners on tasks within their zone of proximal development. When a learner cannot accomplish a given task but that task is within the learner's ZPD, using the right tools and appropriate assistance the learner may be able to accomplish the task. This assistance is also known as scaffolding. Scaffolding is a temporary support that parents or teachers can give to a child to assist him/her to accomplish the task. After mastering the task, scaffolding will be gradually removed and the learner will be able to complete the task on his/her own. In addition to believing that human development is the result of interaction between people and their environment, Vygotsky (1978) added that these interactions are not limited to people but also to mediation tools or artifacts such as language and teaching material (various signs and symbols). According to Feuerstein and Rand (2019), mediation can help to modify a child's cognitive development. According to Wertsch (2017), mediation is a central theme in Vygotsky's writings. Mediation is related to significant people in the learner's life (Vygotsky, 1978). They are people who can choose, organize, and present the information and/or tasks that they believe are most appropriate for the child in order to move the child forward (Gage and Berliner, 2018). The mediator in this study is a special needs education teacher who uses tools such as language and teaching material to assist the child in discovering and learning. The teacher's interactions with students form the foundation of the entire mediation process. It is critical to consider the following: Interaction between teacher and learner, as well as the presentation of teaching materials by the teacher, serve as mediation tools. The teacher stands between the learner and the learning material. As a result, being a mediator will depend on how a teacher integrates his or her students' prior knowledge and the teaching material so that the students can acquire new knowledge." Daniels (2022) and Thompson (2019a & b) identify the following forms of mediation that influence progress within a ZPD: 1. "Direct guidance from a teacher or a more capable peer. The instructive voice, while initially didactic, can be internalized by the learner as part of his or her own inner speech. 2. Expert modeling of a behavior or task that the learner initially imitates and then internalizes and appropriates. 3. 'Oral or written feedback that provides performance guidance". "The zone of proximal development (ZPD), which emphasizes the importance of the teacher in a student's learning, is one of the central ideas of Vygotsky's theory of social constructivism. 19 The ZPD specifies which activities a student can complete on their own and which they must complete with an instructor's assistance. According to the ZPD, learners are able to comprehend and master knowledge and skills with the aid of a teacher that they would not be able to do on their own (Schreiber & Valle, 2021). Learners can complete a task independently once they have mastered it. According to this theory, the teacher is not merely a passive figure for the learners to learn from; rather, they play a crucial part in their knowledge acquisition. 2.7 CHAPTER SUMMARY The results of the global literature's studies have demonstrated that deaf learners have experienced reading challenges and the various interventions designed to address these challenges have existed for a very long time. Building inclusive educational facilities that accommodate deaf learners alongside those without challenges is a strong global trend right now. The literature on deaf learners in South Africa also describes how the government has tried, to address the many difficulties presented by deaf learners at establishing special education schools. The literature has, however, shown that there are no quick fixes or simple answers to these problems. Finding practical, context-appropriate solutions in this field calls for ongoing research and consistent approaches. The study's methodology and research design are covered in the following chapter. This includes the research method, sampling, research instruments, data collection process, trustworthiness, ethical considerations, and the study's limitations".

CHAPTER 3 RESEARCH DESIGN AND METHODOLOGY 3.1 Introduction This research explored the approaches and methods of teaching used by foundation phase teachers when teaching reading to deaf learners in special schools. In this chapter, I thus provide the research design and methodology that I used to conduct this research study. The study employed the qualitative method to get the answers to the research question. The intention was to study the phenomenon in a natural setting to get rich data. This was to get as much information from the teachers as possible. Patton (2020) asserts that the qualitative approach provides a chance to get close enough to the people and the circumstances to capture what's happening. In addition, I also discuss the sampling process or method in this study. In doing this, I start with the profile of the participants and my position as a researcher. Importantly, ethical and validation issues are considered in this chapter. Furthermore, data generation procedures are described. These were semi-structured interviews and classroom observations". Based on the foregoing, this chapter emphasizes the research goal and questions the study aimed to address. The research goal and questions are stipulated below. The research goal: This study seeks to explore Grade 1 teachers' experiences in [teaching of reading to deaf learners in special schools](#). Research questions: The main research question for this study is: [What are Grade 1 teachers' experiences with teaching reading to deaf learners in special schools?](#) Sub-questions 1. [How do grade one teachers teach reading to deaf learners?](#) 2. [What challenges do teachers face when teaching reading to deaf learners?](#) 3. [What strategies can be used to successfully support the development or improvement of reading to deaf learners?](#)

4. [Why do grade 1 teachers' experience difficulties when teaching reading to deaf learners?](#) 3.2 Research Paradigm A research paradigm is a set of shared assumptions and a strategy for approaching research problems (Kuhn, 1996). According to the author, a paradigm is an overarching assumption and viewpoint that guides all other research and development in a given area of study. A research paradigm is a way of thinking that establishes the scope and methods of research. Since a clear paradigmatic stance helps guide our design decisions and justifies these decisions, Maxwell (2018) argues that as researchers we need to be explicit about which paradigm or paradigms our work is drawing on. Instead of having to create their paradigm for research, using an established one enables a researcher to build on a logical and well-developed approach. Cohen, Manion, and Morrison (2021), state that [an interpretative study paradigm, which was selected for this study, is characterized by a concern for the individual](#). According to Bertram and Christiansen (2019), the interpretive paradigm seeks to comprehend people's [social behaviour and how they interpret their experiences](#). The complexity of the world is acknowledged by interpretivists, according to Creswell (2016), who also agree [that social constructions like language, consciousness, and shared meanings are the only ways to access reality](#). Grix (2020) claims that Interpretivism is a response to positivism's dominance in a similar manner. Furthermore, Interpretivism contends that multiple realities are social constructions rather than there being a single reality. The fact that reality is frequently mediated by the senses and that a researcher cannot access external reality without allowing their background and worldview to taint it makes this research approach also subjective. Additionally, this paradigm enables the researcher to gain access to participants' perspectives and real meanings of social phenomena (Neuman, 2021). With this perspective in mind, the interpretive paradigm has worked well with this study because the participants teach in their settings and draw on a variety of approaches based on their personal experiences and beliefs about how to best teach reading to deaf learners in special schools. Interpretivism attempts to display how participants make choices in social situations" (Burton & Bartlett, 2017). In interpretivism, there are various varieties of impartial reality rather than a single one. Therefore, interpretivism has given the researcher a framework for investigating how teachers teach reading to deaf learners in special schools. Tuli (2020) focuses on a few benefits of this paradigm. [The first benefit is that interpretivist researchers can better understand phenomena in their social context by using a variety of perspectives to examine phenomena. Additionally, researchers can carry out these kinds of studies in a natural environment by utilizing important methodologies like grounded theory, ethnography, case studies, or life histories to get an inside look at the research's subjects](#). Wellington (2017) add that another benefit of this paradigm is that interpretivism enables investigators to probe subjects' [beliefs, values, prejudices, perceptions, views, feelings, and perspectives. As a result, the useful information gathered has given researchers better insights for subsequent action](#). Although this study was supported by interpretivist views and had the aforementioned key strengths, there have been some criticisms of this paradigm. According to Cohen, Manion, and Marison (2021),

interpretivists prefer to gain a deeper understanding and knowledge of phenomena within their complex contexts rather than generalizing their findings to different people and situations. As a result, they frequently fail to use scientific methods to confirm the accuracy and applicability of their findings. Additionally, Mark (2020) contends that interpretivism's ontological view is frequently subjective rather than objective. The results of the research are therefore unquestionably influenced by the researcher's interpretation, belief system, way of thinking, or cultural preference, which leads to a great deal of bias. The strongest argument in favour of an interpretive study, according to Wahyuni (2022), is that the data collection and analysis are greatly influenced by both the researcher and the study subjects. Data have been gathered for this study from the participants' classrooms and schools. Thus, the interpretivist strategy concentrated on various teachers and their varied experiences in LSEN schools. In the section below, I go over the theoretical methodology that guided this study. A paradigm is strengthened by its theoretical methodology and research methods.

3.3 Research Approach

Cope (2021) defines research design as the framework of research methods and techniques selected by a researcher to conduct a study. To ensure the success of their studies, the design enables researchers to fine-tune research techniques appropriate for the field. The purpose of a research approach is to make sure that the information you gather enables you to approach the research problem as logically and unambiguously as possible". The qualitative research methodology was appropriate for this study. A qualitative approach is an investigation that seeks to explore and comprehend a phenomenon through a detailed, holistic picture, analyses words, presents informants' perspectives in-depth and conducts interviews with a variety of people (Creswell & Clarke, 2017). According to Holliday (2018), qualitative research distinguishes between activities taking place in a particular setting as opposed to manipulating variables. It is a method that makes it possible to respond to the research questions by painting a full picture of the actual circumstances surrounding teachers' classrooms where there are learners with learning challenges. The qualitative approach assisted in finding out how the four teachers reflected on the ways they taught reading to deaf learners and their experiences in the process. It was strongly felt that methods of teaching reading could adequately be expressed in words rather than in any form of quantification. The four teachers expressed their perceptions in teaching reading in special school employing words hence a qualitative approach was used. The qualitative approach enabled the unearthing of teaching methods that were perceived to be important in teaching reading as perceived and experienced by the teachers. The participants gave their own reflections which is one of the strengths of the qualitative approach. Therefore, the participants presented their "emic views" of deaf learners with reading problems while empathizing within the process. The primary benefit of using a qualitative approach is that it enables the researcher to gain a comprehensive understanding of events as they happen (Cohen, 2021). According to Sekaran and Bougie (2023), qualitative research typically produces more creative findings than other types of inquiry. The qualitative methodology aids the researcher in developing a deeper comprehension of teachers' management techniques in real-world situations. In order to produce rich narrative descriptions and build case studies, Patton (2020) claims that qualitative researchers engage in naturalistic inquiry, studying real-world settings inductively. Qualitative research's focal point is on how each participant views and understands his/her context and circumstances which facilitate meaning construction based on experiences. Qualitative research maintains researchers receive elucidated explanations, catch sight, and interpret small parts of reality (Holliday, 2018). Participants are observed in their actual setting. Through interactions and observations, the qualitative research methodology has allowed the researcher to observe the participants in their natural settings and focus on their meanings and 4 interpretations. The researcher has gained new insights and perspectives of the participants' diverse perspectives on the challenges they faced and how they dealt with teaching reading to deaf learners.

3.4 Study Location

"The case study took place at two special educational needs schools which caters deaf in the South African province of Gauteng. The name of the school will not be disclosed in order to maintain confidentiality and anonymity, as well as to protect the rights and welfare of the participating teachers. The schools accept and educates deaf learners. The institutions serve learners from all races in South African society and is representative of average conditions or circumstances in special education centers. The region chosen for this study is one that is relatively simple to get to because it is the province where the research work at.

3.5 Research design

"The study of data production using theoretically informed approaches is known as a research methodology. This includes the research design, methods, participants, data collection tools or instruments, interventions and procedures used in the study (McMillan & Schumacher, 2021). Jonker & Pennink (2020) go on to say that a research methodology is a theoretical decision that should support the research paradigm and the research methods employed in a study. As a result, the research paradigm, research methodology, and research methods must be all in line with one another in a study. In this study Phenomenological research design will be used. Phenomenological research is a

qualitative research approach that seeks to understand and describe the universal essence of a phenomenon (Groenewald, 2020). In addition, the approach investigates the everyday experiences of human beings while suspending the researchers' preconceived assumptions about the phenomenon. In other words, phenomenological research studies lived experiences to gain deeper insights into how people understand those experiences ". "phenomenological research design will enable the researcher to understand a phenomenon's universal nature by exploring the views of those who have experienced it. By using this research design, the researcher will be able to explore teachers' experiences with the teaching of reading to deaf learners in special schools ". 3.6 Sampling "Sampling is the systematic choice of a subset of participants whose characteristics are truly representative of the entire population under study (Morrow, 2023). The participants in this study were chosen using purposive sampling. Therefore, the sample have aim to provide the most comprehensive data imaginable, which have helped to achieve the study's and the research's objectives (Babbie, 2018). This method is also employed when one wants to study a portion of a larger population where the participants can be easily located and contacted but studying the entire population would be an impossible task. When one needs to study a particular cultural domain with knowledgeable experts inside, the purposive sampling technique is a type of non-probability sampling that works best (Tongco, 2020). Bertram and Christiansen (2022) state that researchers must choose how many people, groups, or objects (like schools) have be observed. Furthermore, they claim that researchers who follow the interpretive and critical paradigms frequently don't care about statistical precision or the question of whether their data accurately represent the entire population. Detailed and in-depth explanations, analyses, and descriptions are of particular interest to researchers. The participants in this study were Grade 1 teachers in the Gauteng West district and Johannesburg North District . 3.6.1 The target group A group of people who share some traits that the researcher is interested in is referred to as the target group (Kahn and Best, 2016). The foundation phase special needs education teachers from two different schools made up the study's target group. Four special needs teachers were chosen, with two teachers from each school representing their school in order to obtain rich information relevant to the research questions. The school was chosen because it had teachers who had taught deaf learners reading for a long time . 3.6.2 Criteria for Choosing the Participants The four teachers were selected because they were the ones who were assigned reading in grade 1 at the school. Also it was felt they were suitable for the study due to the long experience they 6 had in teaching reading. all teachers had taught the skills for some time. The goal of purposeful

sampling is to get cases that are likely to be "information rich" concerning this study. The length of time a special needs education teacher had been working with learners was another factor in selecting the

participants. It has been determined for this study that the special needs teachers, who had worked with deaf learners for many years were a good choice to respond to the research questions. 3.7 Data Generation Methods "According to Bertram and Christiansen (2019), "data" refers to the information that researchers used as evidence to determine the answers to the questions they are posing. The researcher can choose from a variety of data generation tools to produce data that is pertinent to the study. According to Creswell et al. (2016), methods are the instruments used by researchers to produce data, and these useful methods can be applied to any type of study. Researchers can collect information about social reality from people, groups, artifacts, and texts in any medium through the tools. They add to this by stating that the methodology serves as a link between the researcher's method (perspective and tool) and philosophical standpoint (ontology and epistemology). The use of multiple methods (triangulation) to generate data increases validity and authenticity (Maxwell, 2022). For this study, two research instruments were used for data generation, namely, interviews (semi-structured interviews) and lesson observations of the lesson taught. During this research process, observed lessons were video recorded. Each research tool was used to assist to respond to the research questions on this study and the actual research situation or the main purpose of the study (Thomas ,2021). 3.7.1 Semi-structured Interviews According to Yin (2020), interviews are the method of collecting data from qualitative research that is most frequently used in case studies. A flexible method for gathering data, an interview enables the use of multisensory channels (Cohen, Manion & Morrison, 2019). To allow the collection of detailed information from the teachers about how they teach reading to deaf learners in the two schools, the interview method was suitable. The interview is a verbal conversation between two people with the objective of collecting relevant information for the purpose of research (Bailey, Hennink and Hutter, 2021). It allows respondents to speak out their opinions, feelings, beliefs, insights, attitudes and experiences about a problem in question through the use of probing questions. Structured interviews, semi-structured interviews, and unstructured interviews are the three types of interviews that can be used when conducting research (Thomas ,2021). They give the

researcher the opportunity to plan the procedure by creating questions that are pertinent to the study, interviews are the most common method used by researchers to gather data. A conversation between the interviewer and the interviewee is encouraged during an interview, which has the benefit of fostering interaction and the growth of a relationship. An individual semi-structured interview was chosen by the researcher for this study. "The semi-structured interviews enable the researchers to give interviewers a clear set of instructions and can deliver real, comparable qualitative data, taking into account the necessity of the interviewer asking open-ended questions. Based on their own genuine emotions and experiences, each respondent uniquely expressed themselves. The researcher was able to accurately record every interviewee's word with the aid of voice recording. The interviews lasted 20 to 30 minutes, and the probing questions helped to unravel the rich data needed for the study. Additionally, the interviewer was able to choose the wording of each question and the use of probes when conducting a semi-structured interview. Open-ended interview questions were used to elicit detailed information about the phenomenon. "The most typical type of interview used in a qualitative study, according to Holloway and Wheeler (2020), is a

semi-structured interview. They contend that in this kind of interview, pre-written questions are used, and the researcher is free to ask for clarification. An interview guideline was developed for these

interviews in order to collect similar types of data from participants and to establish an order based on the data gathered. The participants were free to use any language they choose when conducting these interviews. The participants were able to express their opinions in greater detail because they were able to speak both in their native language and in English. Additionally, the participants' self-narratives during the interviews guided the questions that were asked. A follow-up with each participant was conducted to ensure that the quality of the data is in line with their interview questions. The researcher wrote a narrative of each interview and transcribe each interview. Lesson observation for all four participants is the next stage of the study's data collection, and this is covered in the following session. 3.7.2 Classroom Observations "Bertram and Christiansen (2021), state that observation entails the researcher physically visiting the study's focus area, such as a school, classroom, or staff room, and watching what is happening there. Walliman (2020) describes observation as a systematic process of documenting the behavioural patterns of participants, objects, and events while interacting with learners without necessarily asking participants what they do or communicating with them. Additionally, observation is a qualitative method of data collection that enables the researcher to comprehend the phenomenon being observed more deeply. The researcher used observation as a method for gathering data by watching and listening to interactions. The researcher was able to observe reality as it develops and record what she saw, giving her a thorough understanding of the situation and the participants (McMillan & Schumacher, 2019). Through observation, the researcher was able to see how teachers taught reading to deaf learners. In order to improve not only in the classroom but also at the school level, Zaare (2023) suggests that teachers use classroom observation as a tool to reflect on their own teaching methods and to learn from other, more successful teachers. The researcher was able to observe and take note of the important aspects of the interaction. Based on the study's objectives, the researcher developed a brief checklist for classroom observation. Bertram and Christian (2021) claim that using observation as a data generation tool is much more effective than relying on other people's opinions and perceptions for understanding a situation. Although the participants have been given guarantees of confidentiality, there have occasionally been mistrust because the researcher's presence artificially enhances classroom interactions. Observations were made in classrooms with deaf learners who have challenges with reading. The following were the main areas of observation in school classrooms:

- Teacher-learner interaction: Here, the primary focus was on how teachers interact with one another and with deaf learners whilst teaching reading.
- Learner-learner interaction: In this section, the interaction between deaf learners in the classroom was be the main focus.
- Presentation of teaching materials by the teacher: The emphasis was on how the teacher is able to teach reading to deaf learners.
- The difficulties that teachers may run into when working with deaf learners in the classroom was also observed.

3.8 Data Analysis Analysis of the gathered data is required in order to meet the study's goals. The analysis, classification, and interpretation of the data within the context of the study is explained in the discussion that follows. Kothari (2018) states that data analysis is the process of classifying collected data, for example, by using categories to extract useful information from raw data. In order to understand these unprocessed data and extract their meaning and pattern, data analysis is crucial (Bell, 2020). In qualitative studies, data analysis should start as soon as the initial data collection process is complete to determine if any information is required or missing. Creswell (2009) describes data analysis as a continuous process requiring thought about the data generated, he also emphasizes the significance

of checking, tidying, transcribing, and reorganizing data with a focus on highlighting information to be used in making recommendations and conclusions. In the event of this study thematic analysis was used to examine the data. Braun and Clark (2016) defined thematic analysis as the process of identifying and documenting patterns or themes present in a data set. Furthermore, Thematic analysis is the process of locating, examining, and describing themes (patterns) within data. The researcher used a digital audio recorder and take notes while conducting the interviews. To ensure accurate interpretations, the audiotape was played backward and forwards several times during the interpretation process. The phases outlined by Bruan and Clark (2019) were used for data analysis, including becoming familiar with the data, creating initial codes, looking for themes, reviewing themes, defining and naming themes, and producing reports. After transcription, the researcher read the data line by line to comprehend and become familiar with it in order to identify codes. The report was created after categorizing interview transcripts and field notes based on commonalities, variations in responses, and themes that have emerged. (Green, 2020) contends that researchers should be well-versed in data to take advantage of chances to enlarge and diversify the sample. Each participant's interview and observation data were reviewed and presented in light of the research questions. Some direct quotations from the information gathered have been used in the report. The originality of the data gathered can be preserved by reporting direct statements from research participants (Cohen, Manion, and Morrison, 2007). Additionally, based on the informants' responses, researchers' opinions were presented and supported by the literature review.

3.9 Validity and Trustworthiness

Friesen (2020) asserts that a variety of elements may obstruct both the fair collection and interpretation of data. These variables include the researcher's own emotional investment in the subject, their preconceptions about it, opinions they form after reading existing literature, and interactions with participants, all of which can skew their ability to collect and interpret data objectively. To add, Kvale (2019) state that validity refers to the extent in which the method used measures what it is meant to investigate. This means that the research should yield accurate results by measuring what it is intended to measure and not something else". Leung (2022) emphasizes that the researcher must make sure that the study's findings are accurate and not just what they think they are. Bertram and Christiansen (2015), who make a similar argument, assert that the researcher must ensure that the data collection tools they employ are standardized, reliable, and transparent. Similarly, to this, Guba (2019) suggests that qualitative researchers should take into account four components of trustworthiness when working to validate their studies which are dependability, credibility, transferability, and conformability.

3.9.1 Transferability

According to Finfgeld-Connet (2020), transferability is the extent to which the findings of qualitative research can be applied to different contexts or settings. However, transferability depends on the study's objectives. This implies that the study's goal of generalizing the findings is the only way it can be met".

3.9.2 Credibility

Graneheim and Lundman (2022) "state that credibility determines whether the research findings represent accurate interpretations of the participants' original views as well as credible and reasonable information derived from the participants' original data. To capture the interviews and data analysis, audio recordings were used. To ensure accurate transcription of the data, the tapes were played back and forth.

3.9.3 Dependability

Cohen, Manion, and Morrison (2011) and Tobin & Begley (2014) point out that dependability includes participants' evaluations of the findings as well as the study's interpretation and recommendations, which guarantees that they accurately reflect the data the study's participants provided. In order to remove bias, the researcher took respondents' opinions and feelings into account when analysing and interpreting the data. The researcher invited the participants to read the results after the interpretation is complete and to confirm whether the results accurately reflect their opinions. During observation, notes were taken and recorded to guarantee the validity of the study and its conclusions ".

3.9.4 Conformability

Elo (2022) "argues that the foundation of qualitative research is the idea that each researcher approaches the research project from a unique point of view. The degree to which the results of a qualitative study can be endorsed or verified by others is known as confirmability (Anney, 2014). Confirmability was attained by making sure that the researcher did not fabricate the interpretation of the research findings, but rather that it was derived from the participant data. The researcher also used the reflexivity element, which aid in putting aside any personal background, beliefs, values, or preferences that might have an impact on the research study. This was done in order to prevent bias from influencing ". Leedy and Ormrod (2023) state that "the validity and reliability of your data collection instruments influence the extent to which you can learn something about the phenomenon you are studying, the likelihood that you have obtain significance in your data analysis, and the extent to which you can draw meaningful conclusions from your data.

3.10 Ethical Consideration

As a result of the involvement of people in the research process, ethics plays a significant role in educational research. From a moral standpoint, McMillan and Schumacher (2019) confirm that ethics is concerned with beliefs about what is right or wrong when engaging with the

participant. To protect the participants' rights and dignity, it is essential to abide by ethical principles. Several components of ethics were involved, including full disclosure, voluntary participation, and informed consent. The researcher has asked the University of the Free State's Faculty of Education Research Ethics Committee for approval before beginning the study and at the institutions where research will be conducted. Following the granting of permission, the process of consulting potential participants started. It was necessary to go over all of their rights as potential participants with them, and those who felt it was appropriate to participate signed a consent form that ensures the confidentiality and security of the information provided. The rights of participants to voluntarily participate and withdraw was disclosed and guaranteed".

3.10.1 Informed Consent and voluntary participation 13 The study provided participants with enough details so they can decide for themselves whether or not to participate. Participants in the study were given consent forms after receiving all necessary information and indicated their willingness to participate voluntarily. Respondents were made aware that they were not required to participate in the study and had the option of doing so. They were also told that they can stop participating in the study at any time if they decide they no longer want to. 3.10.2 Anonymity and Confidentiality Throughout the interview, privacy and confidentiality was respected. The researcher maintained the confidentiality of the recordings and notes. Participants' names were concealed behind codes. David (2022) asserts that even if the researcher is able to do so, the use of codes ensures that no one reading the research report will be able to connect the response to a particular participant. This guarantees that the participants' private data stays anonymous. 3.11 Chapter Summary This chapter gave an overview of the study's scope by describing the research paradigm, the research procedure, and the methodological tools used. The chapter described the specific approaches, paradigms, and instruments that were used for data collection while also describing the type of study and its focus. Discussions have also been had about the data analysis procedure, the ethical issues that were taken into account, and the reliability and validity of the results. The final section of this chapter was devoted to ethical issues and the procedures that were used to ensure that both the researcher and the participants were aware of the objectives of the study and their respective roles within it. Everyone involved was viewed as important and valued individuals, and transparency was the key to this process. CHAPTER 4 DATA ANALYSIS

4.1 Introduction In Chapter 3, a comprehensive presentation of the qualitative research approach and design was discussed in order to respond to the main research question and sub-research questions of the topic under study. After the approval of my ethics application, data was collected. Participants' responses were noted during the data collection strategies described in Chapter 3 which were: ? Semi-structured individual interviews with four teachers from two different special schools? Classroom observation whereby the researcher was observing the participants whilst teaching reading to deaf learners.? The purpose of this study was to explore grade 1 teachers' experiences with teaching reading to deaf learners in special schools. This chapter presents and analyses the data gathered from the teaching of reading to deaf learners in the classroom, [the teacher's methodology](#), [the instructional](#) materials used, [the learner's activities, and other](#) pertinent [activities](#) occurring [in the classroom](#), as well as [the](#) data from the conducted interviews. [In order to get the answers to my research question about](#) teaching of reading to deaf learners I interviewed [four teachers from two different schools](#). These teachers [were interviewed](#) individually. Eisner (2020) state that [One-on-one interviews are valuable for obtaining detailed, rich data, exploring complex issues, and understanding the individual perspectives of participants](#). Moreover, Thomas (2021) argues that interviews [particularly deep of a subject is needed and when researchers explore emotions, personal experiences](#). [This means that their experiences and perceptions might not be the same](#) “.

Data Analysis Analysis of the gathered data is required in order to meet the study's goals. The analysis, classification, and interpretation of the data within the context of the study is explained in the discussion that follows. Kothari (2018) states that data analysis is the process of classifying collected data, for example, by using categories to extract useful information from raw data. In order to understand these unprocessed data and extract their meaning and pattern, data analysis is crucial (Bell, 2020). In qualitative studies data analysis should start as soon as the initial data collection process is complete to determine if any information is required or missing. 1 Creswell (2009) describes data analysis as a continuous process requiring thought about the data generated, he also emphasizes the significance of checking, tidying, transcribing, and reorganizing data with a focus on highlighting information to be used in making recommendations and conclusions. Thematic data analysis was used to analyse the findings from this study and are presented under the specific themes as derived from the data analysis. Main themes that emerged from the data collected in both the classroom observation and individual in-depth interviews were categorised into themes. The data is presented following the critical components that form the body of any classroom teaching/learning processes/lessons. I used these components to develop the themes/categories for data analysis.

Having employed the guidelines of thematic data analysis prescribed by Creswell (2004), five themes were identified by the researcher. These are as follows: understanding how teachers teach reading to deaf learners, strategies to support the development of reading to deaf learners, creating a good classroom for all deaf learners, challenges faced by teachers when teaching reading to deaf learners in the classroom and support given by teachers to deaf learners when teaching reading. I have chosen to discuss each theme across the data collected from the respondents and the lesson observation. The intention is to provide a clear picture of how each theme performs across the board. In the discussions, I have chosen to represent the teachers with the symbol Teacher 1 (T1) to Teacher 4 (T4). I have also chosen to provide the data in each theme following the research questions, for purposes of ascertaining that the research concerns were covered and the threading of the study is concrete. This follows that the interviewees were asked these questions during the interviews and the questions were also used as a guide for examining and analysing the data in the transcriptions".

4.2 Demographic profiles of the study participants 'Table 4.1 provides background information on the participants who took part in in-depth interview and classroom observation. The data were generated from two different setting, namely suburban and township as the research site of the study. Demographic profiles of the study participants: A total of four participants took part in this study of which two were black, and two white participants. All participants were females. The participants' ages ranged from 35 years of age to 50 years of age. three participants obtained their bachelor of education and one participant has Bachelor of Arts Degree and Postgraduate Certificate in Education. Although this sample of how teachers teach reading to deaf learners could be considered big, the feedback obtained from all of the participants was unanimous. The demographic information of the participants is summarised in Table 4.1".

Context	Gender	Age range	Level of Teaching (years)	education experience (years)
Teacher 1 Suburb	Female	40-45	B.Ed. 15 degree	
Teacher 2 Suburb	Female	45-55	Masters 22	
Teacher 3 Township	Female	35-40	BA& PGCE 10	
Teacher 4 Township	Female	40-50	B.Ed. degree 17	

4.3 Development of Themes I used semi-structured interviews and classroom observation as an initial method in understanding the participants' perspectives about the study's research question: What are Grade 1 teachers' experiences with teaching reading to deaf learners in special schools? I developed both interviews guidelines and observation guideline using research goal, literature theory in this study. In preparation for lesson observations, the data obtained from interviews assisted to understand each participants' perspectives about the research topic and to get an idea about how they do things in their classrooms. In addition, this study has not only focused on the perspectives of the participants, but it went into the participants' classroom spaces in order to observe how they grapple with the teaching of reading to deaf learners. Moreover, in this study, the language of teaching and learning was south African sign language, all participants and learners in this study communicate in sign language ". Table

4.2 Shows the themes that emerged from the interviews and classroom observation Table 4.2 Themes that emerged from the study Exploring grade 1 teachers' experiences with teaching reading to deaf learners in special schools. 1.How teachers teach reading to deaf learners (visuals) Picture books Letter cards Phonic word wheel 2.Strategies to support the development of reading to deaf learners Drawing pictures and keywords Using pre-reading stage Asking questions 3.Creating a good classroom for all deaf learners Learning friendly environment Reducing visual noise Visually appealing 4.Challenges faced by teachers when teaching reading to deaf learners in the classroom Lack of SASL knowledge Lack of resources Untrained teachers 5.Support given by teachers to deaf learners when teaching reading. Effective communication Inclusive classroom environment Visual materials 'In this section, to discuss and make sense of the data, I use various codes for the participants. I use the following codes: Teacher 1 (T1), Teacher 2 (T2), Teacher 3 (T3) and Teacher 4 (T4). In each theme, the data from semi-structured interviews were assembled and coded according to the likeness and differences of views and answers. This assisted me to see the similarities and differences of thoughts between the participants. Next, I present and discuss the perspectives of the participants on teaching reading to deaf learner's".

4.3.1 How teachers teach reading to deaf learners This section presents, interprets and discusses what grade 1 teacher's experiences when teaching reading to deaf learners in the classroom. The participants had some common and different perspectives about how teachers teach reading to deaf learners. For instance, when asked about their

understanding on teaching reading to deaf learners, in the interview. Research participant T1 explained that: In grade 1 the teacher must focus on visuals. Picture books are great for helping deaf learners learn to read. As a teacher you have to sign and finger spell the word to the learner, point to the printed word and the accompanying picture, and then use the sign for the word. If you are teaching the learner to read lips, have the learner point to the picture, point to the word, and then watch your mouth as you slowly and deliberately speak the word. T2 had the following to say: A teacher who teaches deaf learners must use letter cards. She stated that a way to help learners develop reading skills is to use letter cards. Letter cards can be used to demonstrate how individual letters form words. T2 added that teachers can even make a phonics word wheel to help. They must demonstrate the difference between vowels and consonants by putting letter card combinations into different piles. T2 reveals that as a teacher you should aim to teach the learner a new combination every day. Again in the view of T1, teachers must read books to deaf learners every day. The books should be age appropriate and interesting. Reading together as a class will improve the learner's vocabulary, develop visual skills and assist in reading comprehension. Learners will begin to develop a love of books. In agreement with T1, T2 added that teachers must read a story together with their learners and then use the theme of the story to make a new version or a new ending. T1 and T2 were in favour of the Social Constructivism theory as both teachers stated that reading together as a class improves the learner's vocabulary, develop visual skills and assist in reading comprehension. According to (Mitchell and Myles, 2018) we learn not as isolated individuals, but as active members of society. Furthermore, Vygotsky (1978) claimed that learning occurs through dialogue, this dialogue is initially instrumental, meaning it takes place between teachers and learners, or even between text and reader (Wilson, 2019). However, the learner makes sense of what is said or written through internal or instrumental dialogue (Vygotsky, 1978). Luke (2022) attests that Social constructivists see reading, like learning, as social practice. The social context affects when you read, what you read, where you read, who you read with and, of course, why and how you read. Interacting with text can involve practices as diverse as reading instructions, scanning a newspaper, or reading an academic article. Thus, when teachers are designing curricula for reading in sign language classes, teachers first need to ask themselves what their learners need to be able to do in terms of social practice". research participant T3 stated that: she uses the existing literacy program that is specifically aimed at deaf learners. Instead of relying on sounds to teach reading, this program uses fingerspelling. Fingerspelling is the practice of using specific hand shapes that represent the letters of the alphabet (Nikisha, 2020). Fingerspelling in a fluent way and grouping syllables can successfully teach deaf learners to read. T3, continued to explain the importance of fingerspelling. She stated that early exposure to fingerspelling help learners become better readers, also Fingerspelling positively correlates with stronger reading skills. She adds that, deaf learners who are good finger spellers are good readers". "Evidence from the observations demonstrates the teachers presented concepts to be learned as a whole word. New words and sentences were either written out on boards, cards, or blackboards and were taught exactly as they were. There was no splitting or subdividing of the words into smaller parts guided by the sounds/phonics or otherwise. Learners were hence expected to sign whole sentences or words and to provide meanings of the words. This method is characteristic of the whole sentence/word approach of teaching reading. Beck & Juel (2020) refers to the whole word approach as a method to teach reading by introducing words to learners as a whole unit without analysing their sub parts. This method involves teaching learners to "sight read words. Although the teachers used this method, they appeared not to have been aware of it, except for T3 who said that they were actually using the method. Mayer (2023) further reveals that the whole word approach has been transformed to the whole language approach. The approach involves language being learned as a whole; learned with meaningful and relevant text. One may ask what kind of method is more productive or effective for teaching reading to deaf learners. Several discussions have already been engaged regarding this issue. Rudolph & Robertson (2019), challenged the use of the whole word approach and advocated for the return to the Phonics methods, but because he lacked evidence his argument has yet to be considered (Beck & Juel, 2022). Rudolph & Robertson (2019) also revealed other educators' beliefs on the same topic. This included questions on how one would be able to pick parts of the words to help understand the meanings if one was using the whole word approach only. Light (2018) did agree with this and claimed that signing of unfamiliar words would be difficult if one had not been introduced to phonics. Thagard, Hilsmier & Easterbrooks (2021) however claimed that it was productive to use a combination of methods. The whole word approach was limited in amount of words memorized by learners (Price, 2020). He also, noted that if one ignored the sound clues and concentrated on design clues, one ran a risk of frustration and possible developmental dyslexia". "Grushkin (2018) argues that fingerspelling provides a linguistic link to English vocabulary and syntax. Padden and Ramsey (2021) investigated reading ability of deaf learners in the first grade. The results revealed

that knowledge of specific South African Sign Language (SASL) structures, including fingerspelling, correlates with reading achievement. Furthermore, in their study, learners who scored better on reading tests were competent in associative skills, such as the ability to write down words that were finger spelled to them as well as the ability to translate initialized signs. To add, looking specifically at performance on the fingerspelling tasks, fingerspelling ability significantly correlated with reading comprehension: better readers were better at recognizing finger spelled words and writing them down in print" (Wiles, 2019). T1, T2 and T3 indicated that deaf learners learn reading when there are visuals in front of them. The participants stated that teachers use visual strategies for incorporating fingerspelling into classroom instruction. Haptonstall and Schick (2016) found that learners' retention of new vocabulary increased when lexicalized fingerspelling was added to instruction. Hile (2019) revealed a strong relationship between fluency in fingerspelling and reading. The research is clear that fingerspelling and reading are intertwined and that they converge for deaf learners, who have early access to visual language, around the first grade. The convergence of these skills facilitates literacy development in deaf learners, allowing them to achieve reading levels that exceed the historically low norms. Research participant T4, responded as follows: "Deaf learners can develop the same reading skills as hearing learners. However, it may take longer for them to develop the necessary language-based skills and require additional classroom supports. So, the same principles of systematic evidence-based reading instruction will apply, but learners may need visual alternatives, sign language, or other forms of manual communication for listening and speaking activities. T4 mentioned that she works with the speech language pathologist and other professionals to develop a reading intervention plan so that she can assist her learners. In agreement with T4, T2 states that more activities, repetition and revision strategies should be conducted and employed along with the combined usage of direct and indirect vocabulary instruction strategies to help learners read. Both teachers emphasized that direct vocabulary developing strategies should be used more than indirect vocabulary developing strategies in order to develop the vocabulary of deaf learners". "From all the participants it is evident that the use of visual support assist deaf learners with reading. In the interview all teachers indicated the importance of using the visual aid to support reading. The Social Constructivist theory points out that teachers need to ensure that they are not reading on behalf of the learners in their reading classes (Wertsch, 2019). In their pre-reading, during-reading and post-reading exercises, teachers can sometimes provide so much support that the learners do not really have to read the text at all. Instead, they need to empower learners to choose what and how to read in ways which suit their own needs and purposes, this can happen by allowing learners to use visual aid (Penrose, Geisler, and Wilson, 2021). Limitations on the part of all the four teachers on what constitutes a method were conspicuous. Given that they named strategies/techniques such as demonstration, explanation, observation, illustration (that give the implementation framework for the general teaching learning approaches) and took them to be methods for teaching reading. 'Evidence from the observations demonstrates the teachers presented concepts to be learned as a whole word. New words and sentences were either written out on boards, cards, or blackboards and were taught exactly as they were. There was no splitting or subdividing of the words into smaller parts guided by the sounds/phonics or otherwise".

4.3.2 Teaching strategies to support the development of reading to deaf learners

Teaching strategies refer to the methods, techniques, procedures and processes that a teacher uses during instruction (Hattie, 2019). It is generally recognised that teaching strategies are multidimensional and their effectiveness depends on the context in which they are applied". Research participant T3 stated: There is no single strategy that can guarantee better reading outcomes, however, she highlighted a number of practices that enable deaf learners learn how to read. T3 mentioned that the first stage of development is the pre-reading stage, the responsibility of the teacher is to encourage reading interest with enjoyable experiences and activities, with an emphasis on using sign language. The principal goal at this stage is to ensure that the learner is socially, mentally, emotionally and physically ready to learn to read. T3 adds that, spatial development is important at this stage as learners are taught to recognize

spaces between words and the descending order of the lines in a text. T3 mentioned that when she reads stories she does it with lots of expression, in order to capture the attention of the learners. She

explained that she asks questions about what is going on in the story as the reading goes along, to make sure that they understand the meaning of the story. According to Pullman (2017) reading for pleasure is so much more than just a form of play or escapism it is also a way of connecting with text which is something that research participant T1 stated that she does it in her classroom. Furthermore, Griffin (2019) mentions that deaf learners who read very little do not have the benefits that come with reading, and studies show that when struggling readers are not motivated to read, their

opportunities to learn decrease significantly (Baker, Dreher and Guthrie, 2020). This can lead to strong negative feelings about reading and create a vicious circle in which poor readers remain poor readers (Juel, 2019).

Reading for pleasure is not just a leisure activity; it's a powerful tool for personal development, intellectual stimulation and enrichment, and emotional well-being. It enables you to be more conversant with others. According to the results, teachers used a variety of instructional materials which were mainly including; real objects, chalkboards, classroom furniture, charts and flashcards used as a support to the teacher's methods in teaching the deaf learners to read were either introduced before the new words were taught or were used during the teaching to convey or consolidate the concepts learned. Although the use of these instructional materials varied in use by the teachers, they presented a similar pattern of use". T2 and T3 explained: Drawing pictures and Keywords sharing the meaning/content of the picture with the learners: is another effective teaching strategy to teach deaf learners how to read. To add, learners may draw a picture of something of their choice and then explain to the class what is going on in the picture. The picture may be a simple scene (such as a family eating dinner) or it may be a full story. They indicated that learners can do this collectively, as a class, or in smaller groups Looking at a painting, a photograph or a drawing, analysing the image and choosing a title. Research participant T2 indicated that for deaf learners, learning to read can be such a difficult task. To support research participant T2 and T3, Mark (2023) argues that beginning readers who use pictures and illustrations to assist with learning to read have several advantages. However, when addressing reading difficulties, those illustrations can sometimes hinder progress. Moreover, using illustrations helps with learners learning Speechreading and Phonological Awareness, make predictions, sequence plots, make connections, and enhance their comprehension skills. Yet, illustrations can also impede in children learning to read accurately, especially when those learners who are struggling with reading already have difficulty with Speechreading. Research participant T1 for example, included curriculum materials, while the blackboard featured more among the materials named. It was interesting to note that no teacher mentioned anything regarding adaptations of or the use of adapted teaching aids. I observed that the instructional materials hence referred to by all the 4 teachers interviewed could equally be used for other ordinary classes (classes for learners without those with hearing impairment); such as charts, drawings, real objects etc. Evidence also reveals that cards, charts (representation of real objects) and the real objects were named commonly used by all the teachers. Research participant T4 an experienced teacher with 22 years of experience narrated that when she started working with another learner in the class, she observed that using pictures and illustrations had a negative impact on the learner's reading abilities. She couldn't decode accurately, so when she would read simple stories she would guess words based on the context of the story and the illustrations she saw with it. She used this and the first letter of the unknown word to guess what she thought belonged there. As stories got harder with more words, more complex sentences, longer stories, and less pictures, the learner's comprehension was affected due to guessing words when she didn't have the phonological awareness skills to appropriately sign out an unknown word. Sydney (2020) argues that using pictures and illustrations with beginning readers has more advantages than not, but for struggling beginning readers, it is crucial to determine that they have the age-appropriate phonological awareness skills to succeed".

4.3.3 Creating a good classroom for all deaf learners

"Communication is vital to building an inclusive environment and since the eyes act as both eyes and ears, gathering information and messages for deaf learners the physical development of the classroom needs to be arranged strategically. Full accessibility needs to be available to all Deaf-learners, in terms of "giving full access to academic subject matter, communication about subject matter, and interaction with adults and peers in a smooth and natural manner (David,2022)". "The Department of Education's Draft Guidelines for the Implementation of Inclusive Education (2002), identifies other indicators for factors impacting learning environments as being caused by: "Socio-economic situation, attitudes to difference, culture of the school, curriculum/learning programmes, communication, accessibility and safety of built environment, support from school/district, parental involvement, capacity amongst educators, capacity amongst senior management, general dysfunctionality of school, assistive devices, availability of learning support materials/resources and violence/abuse" (Department of Education, 2002:84)". "It needs to be made explicit that an inclusive education approach is not only aimed at learners with disabilities or special needs but rather at all learners. There are learners who experience barriers to learning caused by "children living in poverty, children from ethnic and linguistic minorities, girls (in some societies), children from remote areas and so on" (UNESCO, 2002). Deaf learners would be included as a linguistic minority group as Deaf people do not see themselves as disabled, rather as members of a linguistic minority group who use Sign Language (and SASL in South Africa) and are part of the Deaf Community. The ideal environment for deaf learners when

learning to read is one in which they are not singled out as different but instead, benefit from the kind of adjustments which go unnoticed by others but are truly transformative for the learner. Many people see deafness as just a loss of hearing however, it is more complicated and creates unique problems for learners (Eisner, 2020). Most learners who were born deaf or lost their hearing before age two have never heard English. The communication language used by all learners who are hearing impaired in South Africa is called South African Sign Language (SASL). This language has its own syntax and grammar. Mark (2023) states that in order to create a positive classroom for all deaf learners it is important to understand that learners may need to use speech reading (lip reading), utilize hearing aids and require interpreter or real time captioning services to make it through their curriculum. Research participant T1 gives out ways in which she creates a good classroom for her deaf learners: The teacher states that she makes sure that she reduces visual noise, deaf learner often uses their eyes to listen. Just as background noise can make it hard to hear what someone is saying, visual busyness (patterns, clutter, flashing or moving graphics) can make it hard for someone to visually focus on signs, lip-reading, or facial expressions. According to Visser (2021) deaf learner's behaviours can be affected by too much or too little environmental lighting. To add, Evans and Lovell (2019) argues that too much light creates a "dazzling" on white boards and learner's desks, which becomes a visual distraction. Deaf learners primarily use their vision to communicate, sufficient lighting and control of excessive lighting is important and is likely to increase attention when reading (Proshanskyn and Wolfe, 2022). Research participant T1 concurs that, "lighting is necessary for deaf learners it also assist them when they are reading. furthermore, she discusses ways in which she decreases noise in the classroom and create a listening and learning-friendly environment for learners. Firstly, she uses rugs or carpeting: Placing rugs or carpet around the room helps to absorb sound, while also making the room more visually appealing and comfortable for deaf learners. Secondly, she places soft tips on the bottom of chair and tables: Chairs and tables are moved around frequently in the classroom, causing unnecessary noise, adding soft tips to the bottoms of furniture can decrease this noise significantly. Seating in the classroom should be arranged into a semi-circle (U- shape), to allow the Deaf learners to have visible access to the mouths and faces of each learner in the classroom, as well as the teacher. This enables the learners to be able to either read lips or facial expressions, allowing them to fully participate in class discussions, and knowing who is speaking and seeing their reactions. Optimal Classroom Physical Arrangements for deaf learners Figure 4.1: Possible Classroom Arrangement. Diagram by: Sarah Riazati (2021). Figure 4.1 presents a diagram that demonstrates how deaf learners must be seated in their classroom to accommodate their needs This diagram incorporates the U-Shaped formation of desks where each learner is in clear sight of each other, along with the teacher being clearly visible. For times when learners are asked to go to the carpet for various lessons, have learners sit in a circle or semi-circle. Having the carpet in the centre of the U-shape arranged desks optimizes the space in the centre that might otherwise be wasted. Within the classroom, have all desks and tables arranged in a circular or semi-circular fashion as this enables group work with the Deaf learners which creates a successfully communicative environment ". "When research participant T2 was asked how she creates a good classroom for deaf learners she clarified that when learners are reading she invites them to sit at the front of the classroom. She stated that as deaf learners are using an interpreter or relying on lip-reading, visual clues or a hearing aid, being closer to the front will help them learn. To add, the teacher said she ensures that she is facing the classroom when she speak, not the whiteboard. Responding to the same question research participant T3 said that good lighting is also must so they can see you clearly. She said in her classroom she speaks normally and clearly, emphasising keywords. repeating and rephrasing when necessary. When learners are doing group reading, she assists deaf learners by positioning them in a group of circle so that the deaf learners can see all the other learners as they speak. From the observation, there was also space left in between the rows for teachers and learners movements.

On the walls there were a number of charts with drawings all the teachers, when asked about the importance of the charts on walls answered that it was for the learners learning while at their leisure time.

Since these charts had equally some labels and writings on them; I concluded that the learners were also learning to read by reading the writings/labelling on the charts. This is in agreement with Nikisha (2019) who sees incidental learning as a process in which learners gain knowledge from interactions with the environment. To him the learning process lacks the formal structures or objectives but is guided by real word experiences. Education is hence highly self-guided by the learners themselves". "Marschall and Rossman (2019) assert that teachers must encourage deaf learners to seat themselves toward the front of the classroom where they will have an unobstructed line of vision. This is particularly

important if the learner is using an interpreter, lip -reading, relying on visual clues or using a hearing aid which has a limited range. In a similar way, Vernon (2017) mentions that teachers must not speak when facing the blackboard, teachers must be aware that moustaches, beards, hands, books or microphones in front of their face can add to the difficulties of lip-readers. Furthermore, deaf learners who lip- read cannot function in darkened rooms, teachers need to adjust the lighting in their teaching environment. Teaching deaf learners can present a unique set of challenges for teachers. According to Milone (2018) in his interview with Jennifer Herbold on A Teacher Takes on the Challenges of Deaf Literacy he said that she responded that it can be difficult to teach deaf learners to read. The respondent also said she strongly believed, and that there's considerable research to support this opinion, that the difficulty is due to external as opposed to internal factors. The majority of learners arrive with very little language. Most of them are not exposed to SASL or to any fully accessible language from an early age. As mentioned in the literature review, education is a fundamental right, which extends equally to all learners throughout South Africa and it is the responsibility of the education system to develop and sustain learning. The Draft Conceptual and Operational Guidelines for the Implementation of Inclusive Education (2002) states that, "a complex and dynamic relationship exists between the learner, the centre of learning, the broader education system and the social, political and economic context of which they are all part" (Department of Education, 2002:130). Each of these plays a major role in whether effective learning and development occur. If a problem takes place in any of the above components, it impacts on the learning process, causing learning breakdown or exclusion. Thus, if the system fails to meet the different needs of a wide range of learners or if problems arise in any of these components, the learner or the system may be prevented from being able to engage in or sustain an ideal process of learning (Department of Education, 2002:130). The factors that lead to learning breakdown and prevent deaf learners from reaching their full potential are known as barriers to learning and development. White Paper 6 identifies the following as barriers to learning and development (Department of Education 2001:7 & 18) • Negative attitudes to and stereotyping of differences • Inflexible curriculum • Inappropriate languages or language of learning and teaching • Inappropriate communication • Inaccessible and unsafe built environments • Inappropriate and inadequate support services • Inadequate policies and legislation • Non-recognition and non-involvement of parents • Inadequately and inappropriately trained education managers and educators Research participant T1 responded by explaining that: "As a teacher she is faced with the challenge of developing learner's world-knowledge and general semantics (in both SASL and English) at the same time that they are teaching them to read. For example, many of the learners arrive at school with no or very little understanding of wordiness the metalinguistic concept that "words" exist. Even at kindergarten, they are already a few years behind their peers . Stanovich (2019) states that people need to acquire a first language to be able to learn a second and third language. For deaf learners, the only language that is acquirable is South African Sign Language (SASL) and this is true only if SASL is constantly and consistently in the environment . Research participant T1 said that as a teacher, one should be creative and find his or her own methods to help the learners in class with teaching materials. She concluded by saying that small things such as nice blackboards for writing, pictures of different drawings, chalk, and dust boards present a challenge for them since they have to wait for the support from the Government and it takes time to obtain it . The participants expressed that most of the teachers do not have the necessary signing skills in SASL to prepare them to use it as a medium of instruction in the teaching of Deaf learners. One aspect of communication that is shared by all of the participants is that there is a general sense of miscommunication and misunderstanding between the educators and the learners. Some teachers still use inappropriate communication methods such as the Oral method of teaching Deaf learners, Total Communication or Signed Exact English and have no motivation to learn Sign Language because the Department of Education does not expect educators at schools for the Deaf to have SASL skills" (DEAFSA, 2003:10) and because they have not supported the Bilingual- bicultural Model to literacy development in the 15 education of Deaf learners. "SASL is still not officially recognized as a separate learning programme for Deaf learners" (DEAFSA, 2003:11). Deaf learners are still forced by the Department of Education to either take two spoken languages or one spoken language provided that another subject is offered in lieu of one language that is not offered. Deaf learners can still take SASL as one of the languages. Research participant T2 mentioned that the challenges that she faces when teaching reading to deaf learners is that deaf learners have trouble understanding language, and that many have not mastered the grammar or syntax of the English language to the extent that much younger normal hearing learners have. This is supported by Kirk and Gallagher (2018) In their study they revealed that the learners do not have uniform skills on the use of sign language signs. On the part of the teacher the study revealed that they needed adequate skills on the use of the existing signs language to enable them fulfil the requirements in implementing the new trends in teaching and move

together with the other teachers in regular schools. Research participant T3 indicated that: she needed to be equipped with adequate methodology and instructional skills in order to effectively and efficiently handle curricular innovations by the Ministry of Education with confidence. She mentioned that she is concerned with lacking consultations from them who are on the ground when new trends in teaching are being brought in. She however, appreciated that not all that is brought in is irrelevant for them, but that some ideas that will work so well for learners may not easily be implemented and workable for the deaf learners. Moreover, the teacher stated that she has a challenge of the availability of teaching resources for use, especially when certain programmes are being introduced and she needs other resource materials to support the teaching of reading to deaf learners. It therefore, showed that training for teachers of the deaf learners should be recast in certain cases to meet relevance of methodology and should be based on a system of identified needs. Research participant T4 felt that she needed training in both technical skills and social skills which would help her handle learners that are coming into school for the first time to communicate more easily.

According to all the participants, they stated that some workshops that they attended were helpful because they enabled teachers to share ideas on how best to make modifications in their teaching so that

they suit deaf learners. Research participant T1 and T4 expressed another challenge that they experienced in their classroom: They mentioned that some words that are taught to children have no signs while others have similar signs, such as 'have/has/had' but written differently. This therefore, poses a big challenge to the teacher either to find a sign for it and in some cases teachers omitted those words making it difficult to construct a sentence using the Sentence Makers and Word Cards. It therefore, means that it will become difficult for the deaf learners to construct the sentence because they have not found a sign for that particular word. Research participant T3 states that another challenge was the lack of reading materials. I found that a lack of reading materials inhibited the teaching and learning of reading in grade 1. Many classrooms had a shortage of posters, which made the classrooms unattractive to the learners. The grade 1 teachers felt that they had been forgotten because they were in township areas. I found that the factors contributing to a lack of reading materials in most schools were a lack of libraries and computers, which could help learners to download interesting reading material. The above result strongly confirms the findings of a study by Mojapelo and Dube (2018) who found that a lack of reading materials lead to learners' poor reading abilities. Using different reading materials relevant to the learners' level of cognitive development can increase their reading proficiency (Wessels, 2020). All participants indicated that it was challenging to implement assessments of reading strategies that they did not understand. Teaching reading was also reported to be a challenge. The teachers only knew the traditional strategies of teaching reading and did not possess a deep knowledge of reading instruction. This finding is consistent with previous studies conducted by the DBE (2008), Desta (2020) and Rule and Land (2017), who maintain that most primary school teachers, in South Africa do not have sufficient knowledge of reading instruction, which leads to learners' poor reading proficiencies. Poor knowledge of reading instruction leads to high levels of illiteracy and drop-out from school in many countries".

4.3.4 Support given by teachers to deaf learners when teaching reading

Teaching deaf learners can be very challenging for teachers, more especially when dealing with learners with unique language needs (Knoll, 2017). Therefore, there is a need for support for deaf learners. Sign language is a unique language that relies heavily on visual communication, body language, and lip movements, and is often supplemented with voice. For individuals with special needs, such as deaf learners in schools for the deaf, learning this language is essential. However, to effectively teach sign language, teachers require specialized strategies that cater to the unique learning needs of their learners. Deaf learners face unique challenges when it comes to language development and communication (Rienties, 2020). Their inability to hear spoken language can create significant barriers to communication, leading to difficulties in reading (Milone, 2018). As a result, deaf learners may require specialized educational services to address their needs. Research participant T1 revealed that to support her learners when they are learning to read she has developed inclusive classroom environment that provide opportunities for all deaf learners to communicate and interact. She argues that effective communication is paramount for teachers and learners in the teaching process as it enables learners to comprehend the material being taught. The classroom itself can help or hinder the learner's success in the classroom. Most deaf learners depend on their vision to either speech read the teacher or to watch an interpreter, so the physical aspects of the classroom become very important. Research participant T2 explained that in her classroom she provides handouts and course materials in advance as learners will not be able to read handouts and lip read at the same time and it will prove a useful context to lip reading. In addition, she ensures learners can always see her face so they can lip read. Weinstein (2019) argues that using picture books for building

reading skills Inspire Visual Thinking, Illustrations in a picture book help learners understand what they are reading, allowing new readers to analyse the story. If learners are having difficulty with the words, the illustrations can help them figure out the narrative, which can increase their comprehension. Communication is a key part of learning, learners who are deaf may find it challenging to understand you and others (David, 2022). Moreover, deaf learners may tire easily from the effort and concentration involved in communicating, lip reading and watching interpreters. Learners may rely on visual cues, technology such as cochlear implants, as well as spoken language to understand what is going on around them". Research participant T3 mentioned that: Clear communication is vital for students who are deaf or hard of hearing. Furthermore, she states that she Speak clearly, and not exaggerate her speech. Exaggerating and shouting can distort speech and lip patterns, making it harder for learners to understand you. A visual aid is typically used to help an audience understand and remember information in a presentation, it can also be used to maintain an audience's attention, inspire listeners to action, Visual strategies help learners focus on important information, see how concepts are connected, and integrate prior knowledge with new knowledge (Marschark, 2017). [Multisensory instruction that emphasizes visual supports will optimize learning opportunities for learners who are deaf.](#) Research participant T3 supports her deaf learners to understand what is being taught in the classroom by using visual cues and by clarifying and communicating important information and concepts in a variety of ways. In addition, she Presents information as visual pictures, captioned videos, video clips and graphics. From the observation it is clear that lack of printed materials hampers the teaching of reading at schools. Research participant T1 and T2 lamented their unattractive classrooms, which did not appeal to their learners due to the lack of supportive pictures in the classroom. When printed materials are available, and grade 1 learners are exposed to them in class, this will contribute to their development of reading skills. The above shows that many township school classrooms lack printed materials, and this can negatively impact learners' reading proficiencies. Printed materials are teachers in their own right. This means that from printed materials, learners can learn reading anywhere, or in the absence of a teacher. Berent (2018) argues that there is a strong argument in favour of visual resources and visual language input in the education of the deaf, given the important role of visual communication for deaf learners. Although the role of visual communication can be promising, Baker (2020) points out that there is a need to pay attention to the way visual resources are presented so that deaf learners do not divide their attention between these visual sources, but rather deal with them effectively in order to enhance their learning. Luckner, Bowen, and Carter (2021) state that [visual materials that support communication may benefit the entire class.](#) [Subsequently, Luckner et al. \(2021\) suggested implementing visual aids like photographs, class itineraries, computers, movies with closed captions and providing instruction in the classroom can assist deaf learners with reading.](#) [Where processing of phonological information is limited due to hearing issues, the visual medium is crucial in creating connections between words and meaning \(devincentis, 2020\).](#) The teachers made most of their movements at the front of the class. This only changed when they moved round the class to support individual learners. In general, movements served as a technique to support the teacher's method of work. Naturally these movements draw the learner's attention to focus where the teacher is positioned and also indicate to the learners that specific attention is required of them (especially if made towards the learners). On the whole, the teacher movements did not interfere with their signing, an aspect that is critical to the instruction. The Department of Education does acknowledge that they have a role to play with regards to training and support of educators with regards to curriculum adaptations "the focus of should be on supporting all teachers in curriculum adaptation and classroom management to support diversity" (Department of Education, 2002:26). 5.8 Summary "This chapter presented data on the participants' experiences with teaching reading to deaf learners in special schools. The participants stated that Teaching has got to be one of the most creative, innovative jobs out there. There simply aren't a one size fits all approach to teaching. Therefore, the most dedicated teachers adapt their teaching methods according to whatever their learners need. The finding therefore reveals that deaf learners learning reading for comprehension skills need to be exposed to learning resources which meet their unique reading needs. These resources should be special resources beyond the normal resources used in a regular reading class. It is evident that in order to teach reading to deaf learner's teachers should Set deaf learners up for success by adapting their teaching methods to support their learning. They should also Prepare their classroom, ensure that they have a clear line of sight at all times and reduce background noise by shutting the classroom door, Deaf learners must be Included in the plan of action so they feel empowered. I have observed that it seems that the problems of Deaf learners in grade 1 is very different from those experienced by many other learners with learning challenges because Deafness combines problems of disability and language. They could be regarded as disabled, or as a which they prefer, with their first language being SASL rather than English. My personal opinion is that

they fall within the socio-linguistic paradigm. Other minority language and cultural groups do not have the same communication problems as the Deaf learners as they can speak normally, while the Deaf learners have to communicate by means other than speech such as interpreters or writing. CHAPTER 5 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction "The preceding chapter focused on analysing data obtained from semi-structured interviews and classroom observations. This chapter presents the summary of the main findings of the study, conclusions and recommendations. It draws together the emerging story from previous chapters, and discusses the findings, according to the original research themes and subthemes stated in the introductory chapter. Moreover, I also looked at how the theoretical framework Social Constructivism and research questions relate to the findings of the study. Lastly, I looked at the recommendations for future studies. phenomenological approach was used to gain knowledge. The approach allows for the observation of cultures in their natural setting to understand interactions among its members (Frankel and Devers, 2020). Therefore, this methodology provided a relevant framework for understanding how deaf learners learn how to read. The purpose of this study was to explore grade 1 teachers' experiences with teaching reading to deaf learners in special schools. Research Questions The main research question for this study is: What are Grade 1 teachers' experiences with teaching reading to deaf learners in special schools? Sub-questions 1. How do grade one teachers teach reading to deaf learners? 2. What challenges do teachers face when teaching reading to deaf learners? 3. 'What strategies can be used to successfully support the development or improvement of reading to deaf learners? 4. Why do grade 1 teachers' experience difficulties when teaching reading to deaf learners? 5.2 Findings "The purpose of this study was to explore grade 1 teachers' experiences with teaching reading to deaf learners in special schools. Information was obtained through observations and interviews. Results are presented using themes related to the four secondary research questions. These, in turn, informed the primary research question. 5.2.1 Findings on how teachers teach reading to deaf learners "The study was looking at the interactions of both teachers and learners when teaching reading. What came out was that all participants described that different methods can be used to teach reading to deaf learners. "One approach is the speech reading method, which can be relatively easy and effective in facilitating communication between teachers and learners. This method involves focusing on the speaker's mouth to understand the message, which can be useful for learners who have recently entered special schools and are new to the learning process. On the other hand, using sign language can be a more time-consuming and challenging approach, but it is recognized as a suitable method for deaf learners. Both methods can effectively facilitate communication between teachers and learners. Speech reading, also known as lip reading, involves understanding the lip movements of the speaker during the conversation (Smith and Bekker, 2021:42). This method is a crucial component of learning reading for deaf learners, as it allows them to comprehend what others are saying orally while speech reading, deaf learners pay attention to facial expressions and language knowledge, which are crucial in teaching sign language to learners. Facial expressions and body language are significant aspects of sign language and provide important cues for communication. By focusing on these visual cues, deaf learners can develop a better understanding of the spoken language and improve their communication skills. All participants indicated that they use the manual method, which involves hand gestures, effectively teaches sign language to deaf learners. One type of manual method is finger spelling, which involves using finger movements to symbolize letters, words, numbers, or sentences. Finger spelling is a versatile technique that can be used to hint at a self-name, city name, abbreviation, acronym, or a word that does not have a corresponding sign (Wiesel, 2020). According to the participants when using finger spelling, there are specific techniques to utilize it effectively and one essential factor is choosing a suitable position or place that is easy for learners to see. Additionally, having relaxed hands is crucial to ensuring clear and accurate finger spelling. These techniques are essential in effectively teaching finger spelling and improving reading skills for deaf learners. Based on the aforementioned, it can be concluded that the manual or sign method is an effective approach to teaching reading to deaf learners. The results indicate that the cue method improves the social interaction skills of deaf learners. However, the manual method is particularly suitable for deaf learners with severe hearing loss, such as those unable to distinguish sounds or do not respond to auditory stimuli. 5.2.2 findings on the strategies to support the development of reading to deaf learners "Learners who are deaf have a variety of backgrounds and needs, the participants provided tips and strategies to increase reading ability outcomes for deaf learners in the classroom. Teaching deaf learners presents both challenges and important opportunities for classroom teachers, especially in the areas of reading. Based on the participant's experiences working with deaf learners across a range of education settings, they have identified two principles for supporting the unique language and literacy development of deaf learners in the classrooms. The four teachers indicated that following these principles creates rich environments for language and literacy growth for

all learners and is uniquely supportive of deaf learners. The results of this study presented the two broad principles for instruction aimed at supporting deaf learners in reading at special school's settings and give specific considerations for putting each into practice. First principle, Optimize Access. The participants indicated that classroom instruction relies on both auditory and visual modalities to convey new ideas and facilitate communication. Therefore, the first principle of supporting the development of reading for deaf learner's effective is to optimize access to content and conversation (Winston, 2019). The participants stated that teachers must set a classroom expectation for having only one speaker at a time, with a brief pause between speakers. This expectation supports respectful forms of communication and discussion in general, but it is particularly helpful for deaf learners with a range of communication preferences. Learners who use sign language interpreters benefit from one speaker at a time because interpreters can only interpret for one speaker at a time (Luckner and Muir, 2021). The findings of the study also reveal that teachers must Consider other sources of noise when choosing a preferred spot. For example, a position closer to the front of the room may also be closer to a radiator or air conditioning unit that interferes with learners' hearing or concentration (Johnson, 2020). In addition, it is important that learners are sitting in a location with clear sight lines to the teacher and/or interpreter so that information from mouth shapes, facial expression, and signs can be used. The second principle is to make content and thinking visible. Deaf learners are not unlike their hearing peers when it comes to the need for high-success reading experiences. However, deaf learners may approach reading with relatively less background knowledge, vocabulary, or innate ideas of what "sounds right" when it comes to spelling, grammar, and word choice (Easterbrooks, 2018). Moreover, teachers must have support visual cues for word learning. Deaf learners benefit from approaches to word learning that link visual patterns to meaning and sounds rather than relying on sounds alone. Word study programs where learners learn families of words by reading, writing, and sorting them ensure lots of exposure to the written representation of words and the opportunity to learn and apply patterns to solve unknown words". "The participants argue that Increasing attention to patterns of classroom talk may be uniquely helpful for deaf learners, but it can also create stronger classroom communities in which everyone takes responsibility for ensuring that communication is clear and inclusive. Similarly, facing learners while speaking (rather than talking to the board or looking down at a page) may become a habit because of deaf learners, but it may in fact enhance your view of the whole class and your awareness of learner's understanding and behaviour in real time.

5.2.3 findings on the challenges faced by teachers when teaching reading to deaf learners in the classroom" "The findings reveal that the teacher's perception of the factors influencing teaching of reading to deaf learners was affected by the teacher's nature of their understanding of the learners and the provisions made to support the teaching. This was characterized by the challenges the teachers named, that depicted lack of support services and other relevant tools/materials to be used by the teachers and the learners. I attributed much of their challenges to their lack of effective training and readiness for the task. T2 went ahead to suggest that learners had a problem with their eyes and that was why they couldn't read correct words. It is not surprising that all the teachers except T2 claimed that most of the learners were slow learners and hence limited the kind of "methods" they used for teaching reading. Research participant T2 response was unique and informing. This too demonstrated the attitude of the teachers towards their learners and also their inability to appreciate the learners learning challenges. According to Berke (2019) observations on challenges met by the teachers of the deaf were also true for this particular study. Parents were reported to be preoccupied with ensuring that the basic needs; such as food and shelter; for the family survival were met; rendering learning of sign language difficult. This situation is predominant for most families where these deaf learners come from. Teachers often learned sign language or improved their sign language while at school (through teaching the deaf learners). In most cases such teachers would be offered short courses to update their signing skills, Evidence has confirmed that parents have an impact on their children's learning (Davis, 2017). Learner's learning can be shaped as children imitate their parent's language and behaviour or through their parents modelling of positive behaviour and engaging of their children in social conversations (Thompson, 2010). According to Milone, (2023) in his interview with Jennifer Herbold on A Teacher Takes on the Challenges of Deaf Literacy he said that she responded that it can be difficult to teach deaf learners to read. The respondent also said she strongly believed, and that there's considerable research to support this opinion, that the difficulty is due to external as opposed to internal factors. The majority of learners arrive with very little language. Most of them are not exposed to SASL or to any fully accessible language from an early age. She also said that teachers are faced with the challenge of developing learner's world-knowledge and general semantics (in both SASL and English) at the same time that they are teaching them to read. For example, many learners arrive at school with no or very little understanding of "wordiness" the metalinguistic concept that "words" exist. Even at kindergarten, they are already a few

years behind their peers. People need to acquire a first language to be able to learn a second and third language. For deaf learners, the only language that is acquirable is South African Sign Language (SASL) and this is true only if SASL is constantly and consistently in the environment. The teachers who participated in this study indicated that they needed to be equipped with adequate methodology and instructional skills in order to effectively and efficiently handle curricular innovations by the Ministry of Education with confidence. They were concerned with lacking consultations from them who are on the ground when new trends in teaching are being brought in. They however, appreciated that not all that is brought in is irrelevant for them, but that some ideas work so well for the deaf learners and also some work may not easily be implemented and workable for deaf learners. Teachers felt that they needed training in both technical skills and social skills which would help them as they handle learners that are coming into school for the first time to communicate more easily. Another area where teachers felt challenged was that some words that are taught to children have no signs while others have similar signs. This therefore, poses a big challenge to the teacher either to find a sign for it and in some cases teachers omitted those words making it difficult to construct a sentence using Word means will to they sign for particular other area of concern that teachers showed much concern was that they did not use the Phonic Chart. The teachers did not use this one because deaf learners had no speech sound at all to help them learn to read. They read using different hand shapes. The methodology did not provide for them from the curriculum developers on how to go about using the Phonic Chart as a result of this the phonic kit becomes irrelevant for deaf learners. "This study has also shown that in most cases teachers had a challenge of the availability of teaching resources for use, especially when certain programmes are being introduced. In this study teachers needed other resource materials to support the teaching of reading. It therefore, showed that training for teachers of deaf learners should be recast in certain cases to meet relevance of methodology and should be based on a system of identified needs".

5.3.4 findings on support given by teachers to deaf learners when teaching reading

Dimling (2020) argued that intense, targeted interventions that use evidence-based approaches are imperative for deaf learners to minimize its impact and maximize language development. Likewise, Shanahan (2017) suggested that the teaching of reading comprehension and learning from text should focus on how to help learners overcome cognitive, linguistic, and intellectual barriers and that major attention should be spent on reading and making sense of texts rather than answering particular types of questions about texts. Kyle and Cain (2015) emphasised that learning strategies before and during reading can help deaf learners overcome challenges that they face when gaining access to and attempting to understand text. Participants proposed simplifying and illustrating the story as significant strategies for teaching reading skills to deaf learners, as this demonstrated a positive impact on the comprehension of all learners examined. Based on this, research participant T1 and T3 recommended adding visuals to texts to support reading comprehension skills among learners who are deaf. "Participant T2 revealed a positive correlation between added visuals and reading comprehension and indicated that learners appreciated the use of visual resources. Gentry, Chinn, and Moulton (2020) highlighted that the use of pictures is a powerful factor in the transfer of factual information during the reading process. Girgin (2023) pointed that shared reading can be useful for developing reading skills among deaf learners and provided guidelines for applying the strategy. Furthermore, the participants highlighted that shared reading was more applicable and effective among deaf learners when teachers determine learner's language levels before and summarize the text for learners if needed. In addition, the stories within the text should be engaging and include repetitive elements to facilitate reading and support learners' motivation. Teaching Reading to Deaf learners showed that mental preparation is important before exposing deaf learners to reading tasks. Thus, teachers need to activate and enhance learners' prior knowledge before they start reading. In addition, teachers need to ask learners to take notes in visual form and drawing illustrations and diagrams to go along with what they are reading. Participants stated that teachers could encourage learners to work with a partner to act out a particular scene or build a model to help envision texts and ask each other questions and debate the text as they move through it (Teaching Reading Comprehension to Deaf Students, 2018). Participant T3 revealed that after mastering sign language, teachers are advised to use picture books that make learners link signs and pictures representing words. In addition, T3 advised teachers to consolidate the above technique that she suggested with the use of letter cards by demonstrating how individual letters form words. Lastly, teachers need to build learners' vocabulary through introducing new vocabulary daily and using it in conversations as well as displaying it on a wall next to a picture of its signed letters. Similarly, research participant T2 suggested introducing the cover of the book and fingerspelling and signing the title, author, and illustrator to build reading skills among deaf learners. (Schleper, 2019) argued that teachers should discuss what the book is about, show the pictures and print, and encourage learners to talk about the book while reading. After

reading, teachers should help learners connect the concepts in the book to the world. 5.3 Theoretical Framework in This Study According to Vygotsky, social learning actually promotes cognitive development throughout one's lifetime. In other words, learners can complete any learning task, no matter how challenging, with the help of an adult or a group of their peers. This theory supports the development of opportunities for learner's collaboration with the instructor and peers in the creation of knowledge and understanding. Kapur (2018) noted that the social construction of knowledge occurs in a variety of contexts and ways. It could be accomplished through group discussions, teamwork, or any type of educational interaction in a place of worship, on social media, or in the marketplace. Learners gain the knowledge and experience necessary for leading fulfilling lives as they engage with others and their surroundings, both material and immaterial". Constructivism contends that language helps to construct knowledge and assign meaning (Gisladottir, 2014). This process starts in our social interactions and extends to our educational experiences. Therefore, language helps develop mental processing and thought patterns (Kozulin, 2023). This was evident in the experiences relayed by the participants. Language and communication were barriers in the formal educational experiences of the participants in this study. All participants repeatedly stated that their school programs did not prioritize their primary language, leaving learners to rely on interpreters for interactions with teachers, administrators, and peers. Conversely, participants who attended a Deaf training reported that interactions and discussions with other Deaf learners, teachers, and staff helped them to better understand and feel comfortable with their education". 5.4 Limitations of the Study This study relied on information provided by the participants. Participants were provided the purpose of this study, measures taken to ensure confidentiality, and future uses of the results. This encouraged honest and forthright answers in response to the interview questions. The main limitation of this study was the language barrier as there was potential for misinterpretation.

Furthermore, another limitation was time due to teachers preparing learners for their Continuous assessment. 5.5 Summary Chapter 5 presented the summary, conclusion and recommendations of the study. Deaf learners often struggle with reading comprehension skills. They also have unique needs as their first language is visual instead of auditory. When teaching deaf, it is important to be informed about which strategies can be used in the classroom in order to support the reading comprehension skills of these learners. The study also revealed that there aren't adequate instructions and teaching resources that are needed to sufficiently teach reading to deaf learners to meet demands of new initiatives. This should also include specialized guidelines from the Curriculum Development specialists. Identifying effective strategies for developing reading skills among deaf learners can be challenging, as it may be difficult to determine specific strategies for various areas and circumstances. Thus, multiple teaching strategies are required to accommodate the various learning needs of learners. Teachers should understand the learning needs and learning styles of the deaf learners in their class when choosing strategies. If schools for the Deaf follow the principles of an inclusive education system, and prevent barriers to learning and development, these schools may celebrate diversity through recognizing potential, increasing participation, overcoming and reducing barriers, and removing stigmatization and labelling" (Department of Education, 2002:41). This will result in schools for the Deaf being the most appropriate, least restrictive, barrier free education system for Deaf learners in South Africa where Deaf learners once leaving these schools, will be productive members of South African society.

APPENDIX H: CONFIRMATION OF PROFESSIONAL EDITING



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Declaration of editing

EXPLORING GRADE 1 TEACHERS' EXPERIENCES WITH TEACHING READING TO DEAF LEARNERS IN
SPECIAL SCHOOLS.

BY

MASHIGE LUYANDA

I declare that I have edited and proofread this thesis. My involvement was restricted to language usage and spelling, completeness and consistency. I did no structural re-writing of the content.

I am qualified to have done such editing, being in possession of a Bachelor's degree with a major in English, having taught English to matriculation, and having a Certificate in Copy Editing from the University of Cape Town. I have edited more than 500 Masters and Doctoral theses, as well as articles, books and reports.

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Jacqui Baumgardt
Full Member

Membership number: EAU001
Membership year: March 2024 to February 2025

+44 7895146059
jacquibaumgardt@gmail.com
<https://jaybe9.wixsite.com/bluediamondsediting>

www.editors.org.za



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Sole Director: J Baumgardt