

University of the Witwatersrand School of Education

THE EFFECTS OF TRANSLANGUAGING TREATMENT ON READING LITERACY PERFORMANCE IN GRADE 3 AND 4 CLASSROOMS

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DECLARATION

I declare that this study is my own unaided work. It is being submitted for the degree of Master of Education at Wits School of Education, Faculty of Humanities at the University of the Witwatersrand. It has not been submitted before for any degree or examination at any other University.

Thandeka Thusi (Ms)

September 2020

DEDICATION

This dissertation is dedicated to my mother Anna Thusi, for being supportive, loving and making sacrifices to ensure that I am successful in realising my dreams. I also dedicate this dissertation to the rest of my loving and supportive family and trust that the completion of this dissertation will inspire them to work hard for their dreams.

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ABSTRACT

The multilingual landscape of South African schools has been viewed as a barrier for literacy development where English-only language in education practices continue to dominate. While the South African education system has adopted a language in education policy (1997), which is in support of multilingual education, the development of multilingual pedagogies and their impact on literacy development has not been adequately explored. Against this background, this study investigated the effectiveness of using translanguaging as a multilingual strategy for reading literacy trajectories in Grades 3 and 4 classes.

The study is contextualised within scholarly literature that deals with themes that include automaticity, simple view of reading, translanguaging, early grade reading and oral classroom interactions which have been researched globally. Review of the literature under these research themes revealed that there was no adequate attention on reading literacy development between phases in multilingual contexts, which provide the rationale for the current study to fill in the gap.

Through a mixed method approach, the study first adopted a translingual lens to observe literacy events that occur in the classrooms. Secondly, the study engaged with metacognitive reflections of teachers' account of own lessons where teaching occurred in more than one language. Lastly, through analysis of a battery of literacy tests written by grade 3 and 4 learners, the study established the learners' reading and comprehension skills in isiZulu and English. The results of the learners' assessments were compared to determine the transition from foundation phase (Grades 1-3) to the intermediate phase (Grades 4-6) and ascertain whether or not there were patterns of a Grade 4 slump.

The findings of the study indicate the level of engagement by the learners in literacy events was not high and a low teacher impact was observed. Secondly, the study found that while teachers were aware of their learners having reading difficulties, their expectations of the learners were higher than the results produced by their learners in the multilingual assessments that were administered. Noteworthy was their acknowledgement that their learners' reading development in their home language was lower than their competencies in English. Lastly, the study found that the learners' literacy development was significantly lower

than the international benchmark and that the transition from Grade 3 to 4 did not result in an improved result for the literacy development in both English and isiZulu.

Given these findings, the learners' engagement in literacy events must increase to improve literacy skills of learners. In addition, there needs to be an improvement in the reading development of learners' home language so as to upscale the literacy development of the learners. Given the limitations in the scope of the study, further research on the efficacy of translanguaging on a large scale is urgently needed to augment the findings of the study.

Keywords: translanguaging, literacy development

LIST OF ABBREVIATIONS

HL Home Language

PIRLS Progress in International Reading Literacy Study

ANA Annual National Assessments

DBE Department of Basic Education

RSA Republic of South Africa

EAC English Across the Curriculum

R Reading

D Decoding

C Comprehension

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1.CHAPTER 1

1.1 Introduction

Multilingual education is a global phenomenon that is implemented by institutions in the United Kingdom and the United States of America. In a country as linguistically diverse as South Africa, with low reading literacy levels, multilingual pedagogy; namely, Translanguaging, is a way of improving epistemic access for learners (Makalela, 2015). The South African Language in Education Policy (1997) prescribes additive multilingualism as an approach to language in education, which provides a room for its implementation through the adoption of translingual pedagogy. However, there is a paucity of research, particularly in the South African context, that investigates the importance of translingual pedagogy in multilingual contexts where literacy levels are low.

Furthermore, due to the efficacy of a pedagogical strategy being closely related to the teachers' understanding of how to implement the pedagogy, there is a need to investigate the existing teachers' metacognitive reflections as a means of supporting teachers and understanding their views. This study investigates teachers' metacognitive reflections particularly pertaining to the literacy development of learners in more than one language.

In addition, the literacy development in more than one language in the transition from one phase to the next is investigated in this study. The performance of learners in Grade 3 (which is the last grade in the foundation phase) is compared to the results in Grade 4 (the first grade in the intermediate phase and where the literacy demand increases). The dearth of studies that investigate all the variables mentioned in this study purposes the current study.

This chapter provides an introduction to the study and outlines the purpose of the study. This chapter provides the aim and the objectives of the study and the research hypotheses. Finally, chapter one outlines the significance of the study and provides definitions to key terms used in this study.

1.2 Background to the study

Globally, education is steadily making a turn from monolingual pedagogical ideologies to multilingual education. This global phenomenon is a response to the 17th Century European ideology of oneness where preference was given to one language in the formation of nation states (Ricento, 2000; Makalela, 2015). The strength of this political ideology to bind and protect the sovereignty of the states was seen in its influence on education and social organization where it became a folklore that using more than one language creates mental confusion. The turn of the 21st Century has, however, challenged monolingual bias in education due to increased mobility of people within and between nation states. Under the guise of justice education and literacy for all, epistemic access, quality and equity can no longer be discussed in any part of the world without serious consideration of languages of teaching and learning (Benson, 2014). Multilingual education, defined in this study as the use of three or more languages for teaching and learning, has been extended to literacy education where reading in more than one language has proven to be an effective way of accelerating comprehension and the positive experience of schooling (Garcia, 2009).

Multilingual education is not a completely new phenomenon in literacy studies as it follows a tradition of bilingual education, which was unpopular for a long period of time due to prevalent monolingual bias in education. Bilingual education was introduced in countries like Canada where, in the mid-twentieth century, learners learned in both French and English when the Québécois party won political power (Garcia & Flores, 2012). While two languages were a benchmark for bilingualism in the global North, it was already evident at the onset of research in the field that bilingual education is an international phenomena. The realities of countries like Canada, New Zealand, Finland, Philippines, and South Africa where more than two languages are spoken provided a more complex picture of sociolinguistic demographics (see Makalela, 2015; Pietikäinen, 2014). It is with the language diversity of countries and globalization in mind that multilingual education is seen as a solution for education.

At the turn of the 21st Century, research emphasis began to shift from bilingualism to multilingual education as a response to complex diversities of globalization. From the work of Cen Williams (Baker 2011), Garcia (2014), Makalela (2015) among others, it was increasingly becoming known that translanguaging, which is broadly defined as a pedagogical strategy

where the languages of input and output are alternated in meaning making, can be resource for learning and teaching in multilingual classrooms. For example, Cenoz and Gorter (2015) highlight that translanguaging is used as a resource by teachers and learners to ensure understanding. Similarly, Lyster, Collins and Ballinger (2009) reported that translanguaging was effective in developing learner's morphological awareness in French and English. From the USA context, Arteagoitia and Howard (2015) found that Spanish word knowledge enhances English academic vocabulary and reading comprehension skills in English (as cited in Cenoz & Gorter, 2015). From an African humanistic approach, Makalela, (2015) made a case that translanguaging can enhance epistemic access in multilingual contexts and that it is indexical to the pre-colonial African value system of Ubuntu where interdependence and fluidity are a cultural competence embedded in multilingual interactions. Up until this stage, therefore, multilingual education is perceived increasingly as a norm for global education systems despite the conservative views that, in reality, still privilege monolingual education and by extension failing the majority of learners who are multilingual.

Tensions between what works and what the orthodox views hold are evident in South Africa. While the constitution (RSA, 1996) and the language in education policy (DBE, 2007) are unequivocal about the value of multilingualism in education and that translanguaging is a tool to realizing the multilingual vision (Makalela 2017, Madiba 2014), the notion of using more than one language in classrooms is not popular or well known by education stakeholders such as school leadership bodies and educators. Translanguaging is often used synonymously with code-switching (which is said to confuse learners). The South African constitution states that "Everyone has the right to receive education in the official language or languages of their choice in public educational institutions..."(RSA, 1996). Similarly, the language in education policy states that there should be "no unfair discrimination in respect of any official languages..." (DBE, 2007). Despite this emphasis on and clear acknowledgement of multilingualism, the focus is still on English and this is evident in the implementation of English Across the Curriculum (EAC), which is a strategy devised by the Department of Basic Education. EAC integrates the teaching of content subjects with language learning; the language in this case being English. The argument is that a considerable amount of attention should be paid to learners' contexts, particularly their linguistic repertoire in the classroom (Garcia & Flores, 2012). However, English is not the strongest language in the linguistic

repertoire of majority of South African learners. On the other hand, stakeholders in the education system have argued that monolingual education is effective for improving learners' literacy and overall educational success (ANA Report, 2014). Evidently, there is a need to resolve this educational dilemma and confusion that seems to characterise complex multilingual situations in South Africa and comparable contexts globally in early grade literacy trajectories. It is against this background that the present study provides empirical evidence to assess the efficacy of translanguaging as a pedagogical tool in enhancing reading literacy success in Grades 3 and 4 in South African schools.

1.3 Statement of the Problem

It is well-documented that the literacy levels in South Africa are below international benchmarks at 75% (see Pretorius & Mampuru, 2007, Howie, Van Staden, Tshele, Dowse & Zimmerman, 2012). The failing trends show that many South African primary school readers are at least 3 years below their expected proficiency levels. The majority of these children are multilingual speakers of African languages from local townships and remote rural areas. Surprisingly, their multilingual ways of knowing and information access are hardly explored in research and in policy documents.

Research is replete with the finding that literacy teaching in South African primary schools has not been effective (PIRLS, 2011 & ANA Report, 2014). As indicated above, a plethora of studies highlight the dire situation with literacy in primary schools sitting far below other developing countries in the world (see PIRLS, 2011; ANA Report, 2014; Spaull, van der Berg, Wills, Gustafsson & Kotze, 2016). For example, recent studies reveal that learners' oral reading fluency is below the typically used threshold of ninety words-read-correctly-per-minute and this negatively affects learners reading comprehension (Pretorius & Spaull, 2016). In response to this national crisis, the ANA report (2014) lists a number of national interventions which mainly highlight the importance of strengthening English learning and teaching. However, monolingual solutions have not proven to be effective in the past and placing importance on English is in itself part of the reason why learners are not performing above (let alone at the level of) the international benchmarks.

For most South African learners, English is not a large part of their linguistic repertoire, yet much emphasis is placed on English in the classrooms. Residual ignorance of other languages disproportionately places multilingual speakers at a cognitive and social disadvantage. This is seen through large numbers of teachers and parents placing importance on one language (English) and rarely taking into account the value of the learners' home language. The main reason that English is preferred as a language of learning and teaching (LoLT) is highlighted as follows by Taylor and Von Fintel (2016),

In order to achieve educational as well as labour market success, the majority of South African children therefore need to become fluent in either English or Afrikaans... majority choose to learn English... as the second language, given its status as a global language, as well as the fact that English is widely perceived to be the language of upward mobility, leading to a preference for instruction in English from as early as possible. (p. 76)

Despite the belief that English is important some teachers may use learners' home language to communicate with learners, but in general there is a paucity of teachers who intentionally (excluding conversational translation) use learners' linguistic repertoires and their contexts to enable epistemic access and improve learners' literacy (Garcia, 2014, Makalela 2015).

In addition to the monolingual bias described above, the second related issue is teachers' content knowledge and methodological approaches to reading literacy. It is a pedagogical concern that literacy is measured by learners' ability to read with little or no consideration of what being able to read entails. There is a large number of learners in primary schools who are able to read words aloud based on what their teachers read to them. "The majority of South African children cannot read for meaning by the end of Grade 4 – even in their home language – and the results in English are no better" (Spaull et al., 2016). Typically, teaching reading is limited to one's ability to decode words and little focus that goes beyond word recognition and decoding which is reading for meaning. Pretorius and Spaull (2016) conclude that there are severe instructional deficiencies that lead to one directional focus on decoding to the detriment of comprehension.

Awareness of and research in translanguaging and multilingual education is increasing in South Africa (see Childs, 2016; Makalela, 2015b, 2019) and is being implemented to certain

degrees in some schools while on the other hand a large number of schools maintain the importance of monolingual pedagogy or the use of additive bilingualism (which has a monolingual ideology) for learners to perform well in literacy assessments and for learners to be able to read and write well. Studies that highlight the importance of multilingual education have been conducted internationally as well as in South Africa (although translanguaging is in its infancy in South Africa). In Singapore, Vaish and Subhan (2015) found that using learners' home language as a scaffold for English teaching and learning in a multilingual classroom aided learners' comprehension as well as improved learners' vocabulary. The learners in this study were part of a school's learning support programme. Learners were able to participate more in classroom discussions which subsequently led to reduced teacher talk time (Vaish & Subhan, 2015).

Similarly, the pertinent role of translanguaging is highlighted in a study that focuses on translanguaging pedagogies in literacy classrooms. The study by Pacheco and Miller (2015) presents observations of multilingual literacy classrooms where teachers used learners' linguistic repertoire to improve learners' understanding of information texts, summary and book report writing. What is interesting is that the study found that the benefits of translanguaging surpass academic value for improving literacy, however, "children learned that their heritage languages and lives outside of school had a visible and valued place in Ms. Camden's multilingual classroom" (Pacheco & Miller, 2015). The learners' realised that their home languages had a place in the classroom and did not have to be separated. The value of learners' home languages is important not only for learners to use their home languages in the learning process but translanguaging enables learners to learn each other's home languages and enables what Makalela has coined as 'ubuntu translanguaging' which is the, "interdependence of multi-layered language systems is enhanced by a simultaneous use of more than two languages within one lesson" (Makalela, 2016).

Translanguaging studies in South Africa include those that focus on primary schools as well as tertiary institutions (Madiba, 2014; Makalela, 2016). These studies have similar findings to international studies about translanguaging that show that translanguaging results in improved vocabulary and oral reading proficiency. Multilingual glossaries were created on an online portal at the University of Cape Town, and the glossaries were used in a translingual tutorial. The multilingual students used translanguaging to deepen their understanding of

economics concepts. Furthermore, the study highlights that languages are fluid (Madiba, 2014). Similarly, Makalela (2015, 2016) conducted a study of university students and an investigation of primary school learners. The university students in the study are pre-service teachers whose vocabulary and oral reading proficiency were improved as a result of translingual treatment (Makalela, 2015). On the other hand the case of the grade 6 primary school learners entailed the use of translanguaging techniques to facilitate reading development in home language (Sepedi) and additional language (English) (Makalela, 2016). One of the key findings is that translanguaging as a pedagogic strategy ensured deeper understanding of the content and identity formation (Makalela, 2016).

Furthermore, translanguaging studies in South Africa where in-service teachers attended workshops on translanguaging and are observed in their classrooms highlight the effect of translanguaging practices. Makalela (2019) found that one of the teachers and the learners in who participated in the study displayed strategic use of multiple language greetings, deeper comprehension of the content taught and multilingual concept development.

While there is a plethora of studies showing the importance translanguaging as an effective strategy, there is a dearth of studies that focus on the efficacy of translanguaging in reading comprehension in early grade reading particularly in Grade 3 and Grade 4. Therefore there is a need for studies that explore translanguaging as a strategy for reading comprehension in contexts where levels of reading comprehension are low such as South Africa.

1.4 Research Aim

The aim of the study was to investigate the effectiveness of using translanguaging treatment measures on reading literacy trajectories in two Gauteng primary schools.

1.5 Objectives

1. To evaluate teachers' translingual classroom practices;
2. To evaluate teachers' metacognitive reflections on translanguaging pedagogy;
3. To assess Grade 3 and 4 learners' literal and inferential comprehension proficiency in more than one language in the pre- and post-tests; and
4. To compare Grade 3 and 4 learners' reading development where more than one language is used.

1.6 Research Questions

1. What are teachers' translingual classroom practices in grades 3 and 4?
2. Is teaching using more than one language effective for learners' reading literacy?
3. What are teachers' metacognitive reflections on translanguaging pedagogy?
4. Is there differential performance between grade 3 and 4 learners in the pre-test and post-test?

1.7 Research Hypotheses

Since the effects of translanguaging treatment proposed in the study will be measured quantitatively, the following null and alternative hypotheses will be tested:

1. HO: There will be no statistically significant differences between the participants' literal comprehension in the pre and post-tests.

H1: There will be statistically significant differences between the participants' literal comprehension skills in the pre and post-test due to translanguaging treatment.

2. HO: Translanguaging treatment will not yield differences between the participants' inferential comprehension skills in the pre- and post-tests.

H1: Translanguaging treatment will yield differences between the participants' inferential comprehension skills in the pre- and post-tests.

3. HO. There will be no differential reading proficiency between Grade 3 and Grade 4 learners due to translanguaging treatment.

H1: There will be differential reading proficiency between Grades 3 and 4 learners due to translanguaging treatment.

1.8 Rationale

This study was prompted by my curiosity as a multilingual learner whose linguistic repertoire appeared to be insignificant in the learning process. I started school only knowing how to speak in isiZulu when my home language was not offered as a subject at the school until I got to Grade 3. This is where I was only allowed to learn isiZulu as a First Additional Language. Furthermore, part of the school's rule was that the learners were only allowed to speak English as this was believed to be an effective way to improve the learners' English proficiency. All this was done at the cost of my understanding, and proficiency in my home language of isiZulu which was later replaced with Afrikaans in Grade 4. I recall finding Afrikaans to be a rather challenging subject and yearned to be taught in isiZulu and could not comprehend why my home language was no longer being taught at school.

Secondly, while working as a teacher at a school that followed the Cambridge curriculum, I observed how multilingual learners battled with reading comprehension as well as understanding the vocabulary used in texts. It was interesting to see learners try to use their home languages during group discussions to express their understanding of tasks and concepts. The two anecdotes raised my curiosity to understand how multilingual children make sense of the world and how their identities are constructed. While peering into the literature on multilingualism, I found concepts that were close to explaining my curiosity, but that was inadequate as I continued to have more questions.

Multilingual pedagogy is being explored globally and studies both internationally and in South Africa (Makalela, 2015) have been conducted and have shown that translanguaging in particular has been effective in improving literacy. However, the pushback from stakeholders in education has been that having one language of instruction is effective in improving learners' reading and reading comprehension skills regardless of their home languages. Stakeholders including, policy makers and teachers have overlooked monolingualism in the classroom as one of the causes for low literacy skills in classrooms. This despite the results showing that multilingual pedagogy has shown an improvement; schools continue to encourage monolingualism and neglect learners' linguistic repertoires.

South Africa is celebrated both nationally and internationally for its diversity. Multilingualism is a known reality in the country, however, this is yet to be incorporated into schools. As a learner in both primary and secondary school the only language that I was taught in (apart

from IsiZulu lessons) was English. The school was monolingual and learners were not allowed to speak their home languages in the presence of teachers who did not understand the language. There were a number of learners who struggled with both reading and expressing themselves in English, however, language barriers were not said to be the main issue, the learners were labelled 'slow' or as having 'learning problems' and the issue of monolingualism was never addressed in a school where majority of the learners were multilingual. In addition as a learner who spoke three African languages fluently I left school only fluent in English and believe that this is as a result of being discouraged to use African languages in school (where I spent most of my time). My linguistic repertoire and those of my peers were not encouraged in my schools.

Multilingual education is overlooked at the policy making level, and this is evident in the national intervention plan in the 2014 ANA report that focuses primarily on monolingual strategies that give preference to English in contexts where learners and teachers are multilingual yet this is not reflected in the documents that guide education in South Africa. Teachers are certainly aware of the constraints and limitations of policies, however, not all teachers are flexible and use learners' linguistic repertoires to enhance learning. Some teachers end up struggling to teach content in English so that learners understand.

Grade 3 is the last grade in the foundation phase. In the first three years of schooling the language of teaching is the learners' home language, however, this changes in Grade 4 because the language of learning and teaching changes to English. Learners' performance in Grade 3 show their results at the exit point of foundation phase, similarly, their performance in Grade 4 show results at the entry point of the intermediate phase. There is a need for a study that not only determines learners' literacy level in both grades 3 and 4 but one that, in addition, looks at the efficacy of using translanguaging in both grades.

1.9 Significance of the Study

The findings from this study on translanguaging and early reading literacy will have far reaching implications for the education sector. Understanding how using learners' linguistic

repertoires can develop literacy is the first and important step in addressing the issue that South Africa and other countries are faced with regarding low literacy among learners.

The results of the study might create awareness and clear misconceptions among the education stakeholders such as teachers about translanguaging. Once the benefits of translanguaging are understood in terms of how they affect reading literacy among learners, further studies on how to use translanguaging effectively may be conducted. This will result in steps towards finding a solution that is sustainable.

Should the study find that translingual treatment is effective, classroom practices may have changed and improved upon to ensure that lessons are engaging and that learners understand what they are learning. Learners and teachers will no longer have to view their home languages as barriers to learning. Teachers will be provided with the support that they need and empowered as professionals.

The study may shed light on further studies that need to be conducted to ensure that multilingual education is used in an effective way. The findings and recommendations may be used firstly, in more classrooms and eventually influence policy makers to make necessary amendments to existing policies that may not be effective for improving literacy in complex multilingual contexts.

1.10 Definition of terms

1. Translanguaging refers to simultaneous use of two or more languages.
2. Literacy: The concept is used in the study as it is conventionally defined.
3. Reading means the ability to decode and understand words.

4. Translingual treatment refers to using translanguaging pedagogy to develop literacy.
5. Multilingualism: The concept is used in the study as it is conventionally defined
6. Monolingualism means the use of one language
7. Monolingual bias refers to preference of one language over others.
8. Bilingualism is the ability for one to use two languages.
9. Decoding refers to the ability to identify letters and recognise words.
10. Reading comprehension is the ability to read and understand texts.
11. Literal comprehension means the ability to recognise information that is explicitly stated in texts.
12. Inferential comprehension refers to the ability to answer questions based on what is known and or evidence from texts
13. Proficiency is being very skilled at something.

1.11 Chapters overview

Chapter One provides an introduction to the study and outlines the purpose of the study. The chapter also provides the aim and the objectives of the study and the research hypotheses. Finally, chapter one outlines the significance of the study and provides definitions to key terms used in this study.

Chapter Two provides an overview of theoretical frameworks underpinning the study on translanguaging and reading literacy. It also offers a review of relevant and most current literature on empirical works on the use of translanguaging strategies in literacy classrooms worldwide.

Chapter Three describes the research design, participants, sampling, data collection, data analysis and the validity and reliability of the study. In addition this chapter discusses the ethical considerations and limitations of the study.

Chapter Four presents the data collected from the study and an interpretation for each of the findings. The chapter discusses the differences and similarities between the pre and post-tests and results of the classroom observations as well as teacher interviews. The data is presented in tables.

Chapter Five provides a summary of each chapter in the study and gives an outline of each chapter and its significance for the study. In addition, this chapter gives a conclusion to the study by attempting to answer the research question and gives recommendations for further study.

2. Chapter Two: Literature Review

2.1 Introduction

There is a plethora of literature about literacy and the nature of literacy studies. The literature in this chapter details the cognitive and the sociocultural perspectives of literacy. The cognitive process of how people learn how to read is well documented through cognitive perspectives such as automaticity and the simple view of reading. Furthermore, translanguaging, early grade reading and classroom studies have given insight on the nature

of literacy in classrooms globally. This study is contextualised within scholarly literature that deals with the following themes:

1. Automaticity
2. Simple View of Reading
3. Translanguaging
4. Early grade reading
5. Oral classroom interactions

This chapter provides an overview of the theoretical frameworks underpinning the study on translanguaging and reading literacy in the early grades. In addition, it offers a review of relevant and most current literature on empirical works on the use of translanguaging strategies in literacy classrooms worldwide.

2.2 Theoretical Framework

This project highlights the interplay between both the cognitive and sociocultural perspectives. The key concepts that put this project into perspective are automaticity, the simple view of reading, and translanguaging.

2.2.1 Automaticity

Automaticity has played an important role in the field of psychology for centuries with one of its pioneers (James) having begun work on it in 1890. James (1890) stated that people often perform routine activities automatically, that is, effortlessly with little thought. This understanding became the premise and one of the earliest descriptions of automaticity. For the purpose of this study, the focus is on automaticity in reading. Automaticity in reading is currently understood as the reader's ability to recognize combinations of letters and words automatically without halting (Abadzi, 2014).

The understanding of automaticity has been developed and debated over the years. There are numerous theoretical views of automaticity (Moors & de Houwer, 2006). Moors and de Houwer (2006) identify two views of automaticity namely: the mechanism-based view and the feature-based view. The mechanism-based view is understood through Logan's illustration of automaticity as direct memory retrieval (Logan, 1988). Furthermore, Logan (1988) states that automaticity is important in skill acquisition. This study highlights how

automaticity is crucial in the acquisition of reading skills. The ability to recognize letters and words is a prerequisite for reading comprehension, which highlights the importance of automaticity. "Beginning readers may not be able to learn to read for meaning until they have learned to identify words and letters automatically" (LaBarge & Samuels, 1974 as cited in Logan, 1988). A learner who is beginning to learn how to read may take longer to recognize letters because they are still new to the reading process and the act of reading will not be automatic for them. The first step in developing automaticity is letter by letter reading which often includes halting (Abadzi, 2014). For automaticity to take place, one needs to be exposed to text often and practice reading to get better at recognizing letters and words and subsequently whole sentences. The former is an illustration of the process of developing automaticity. According to Logan (1988) automaticity is acquired in consistent task environments. In addition, Logan argues that as individuals gain experience learning a specific task (like reading), they memorise letters and at a later stage words which they are able to remember when they see them again (1988). The emphasis on memory retrieval for the mechanism-based view is evident how repetition or practising reading will help individuals remember what they learn.

On the other hand, is the feature-based view of automaticity, which focuses on the different features of automaticity over and above the role of memory retrieval as an integral mechanism of automaticity. The features include those which are known as the goal-related features which include: (un)intentional, goal directed, goal (in)dependent, (un)controlled/(un)controllable, and autonomous (Moors & de Houwer, 2006). These features are understood in relation to goals. Further details on the features of automaticity can be seen in Moors and De Houwer (2006).

The next part of the framework of automaticity focuses on the most recent literature on automaticity as it relates to reading and (most relevant to this study) teaching reading. Abadzi (2014) outlines a number of significant insights on automaticity. The first set of insights are about when is the optimal time for individuals to acquire automaticity. To protect those at risk of school dropout, automaticity should be acquired in grades one to two (Abadzi, 2014). Secondly, without practising to read, learners will continue to read slowly which will affect reading comprehension (Abadzi, 2014). Abadzi (2012, as cited in Land, 2016) argues that readers must move through text fluently and swiftly to read effectively and states that the

minimum reading rate in English is 45-60 words per minute. According to Land (2016), automaticity develops only through exposure to texts and association of particular clusters with words or units they represent. Most teachers are aware of the importance of exposing learners to texts, however, the extent to which learners understand the texts that they are exposed to is not fully understood or explored.

Land (2016) highlights three functions of automaticity or things that cannot be done in the absence of automaticity. Firstly, in the absence of automaticity it is challenging for a reader to construct a growing interpretation of texts as they read and to use context to enable comprehension. Secondly, Land (2016) argues that without automaticity it would be difficult for readers to gain new information from the text and lastly, to perform any higher order skills associated with reading.

The importance of automaticity is highlighted in a number of instances by researchers (Abadzi, 2012, Land, 2016); however, its limitation is in its emphasis on word recognition of the letters and words that a reader sees. Automaticity does not equate to comprehension but rather focuses on the recognition of letters and words and the ability to do this is considered reading. According to Abadzi, (2014) individuals are able to read in any language as long as the letters or symbols are known to the reader. Automaticity takes place in different languages with different levels of difficulty depending on the orthographies of the languages. Languages that have consistent patterns and that do not have words that are spelt the same and have the same meaning are said to be easier to read (Land, 2016).

Based on the literature, one can conclude that continuous reading practice in early grades can ensure automaticity for learners. Automaticity does not result in text comprehension which suggests that once automaticity has been acquired it is also important for learners to be taught to read for meaning.

2.2.3 Simple view of Reading

The simple view of reading is a model of reading that was proposed by Gough and Tunmer in 1986. The model provides a view of reading in relation to decoding and comprehension. Hoover and Gough (as cited in Dreyer & Katz, 1992) define the model of reading:

The Simple View holds that reading comprehension ability can be predicted by two components: decoding, defined as efficient word recognition, and linguistic comprehension, that is, using lexical, or word level information to achieve sentence and discourse interpretations. (p.169)

The features that make up the simple view include decoding, comprehension and reading (as highlighted above). Decoding is the ability to recognise letters and words using letter- sound correspondence rules which result in word recognition skills (Gough, 1993). Decoding takes place on different levels for examples learners start with decoding letters before they are able to decode whole words or sight words. Decoding in this manner is taught during the early grades for beginner readers during their early grades. The orthographic cipher -which is the system of letter-sound correspondences of a language- is one of the ways in which decoding takes place (Gough, 1993). The word recognition that takes place as an individual decodes words or letters may be that of readers making associations with words that they have learned before or searching for information that is stored in the individual's memory. An example of such decoding is the use of sight words which focuses on letter- sound correspondences (Gough, 1993). The ability to decode words is often aided by teachers, however, children learn many words through interaction with environmental print - words encountered in the ordinarily, noninstructional environment (Goodman, 1986 as cited in Gough, 1993).

Evidently, the key feature of decoding is the ability to recognise words using phonological, graphological and meaning cues in letter-sounds-words combinations. The key feature of the simple view of reading is that there is a difference between decoding and reading (Gough and Tunmer, 1986). This difference is explained in the formula that states that reading is the product of decoding and comprehension ($R = D \times C$) (Gough & Tunmer, 1986). The comprehension in this formula refers to linguistic comprehension rather than reading comprehension and decoding is a prerequisite for comprehension (Gough & Tunmer, 1986). For the simple view of reading, automaticity is embedded in decoding for the decoding must be automatic and accurate (Gough, 1993). The simple view of reading gives educators insight on what is important about reading and that reading goes beyond learners being able to sound words or write them, however, another important component that makes reading, 'reading' is being able to understand the words. While the simple view of reading places

importance on linguistic comprehension, it also cautions against the misconception that having linguistic comprehension means that a person will be able to read. The point is to have a combination of decoding and linguistic comprehension for reading to take place (Gough & Tunmer, 1986). The lack of linguistic comprehension is what this study argues to be part of the main problem in second language classes thus if teachers place more importance on decoding rather than on ensuring that the learners also understand what they are reading, reading will continue to be an educational issue.

Furthermore, the ability to recognize words depends on one's knowledge of letter-sound correspondence rules in that language (Gough & Tunmer, 1986) as a result decoding in English for a learner who is accustomed to African languages may be more challenging for learners or readers whose home languages do not include irregular words like those in the English language where the spelling and the sound of the word are not the same.

This understanding of reading and the simple view framework has led to researchers being able to intervene and improve English second language learners (ESL). Gough and Tunmer, (1986) make note of the fact that extensive research had been done that showed that decoding and comprehension make separate contributions to reading comprehension. Research on the impact of interventions based on the premise of the simple view of reading found that the strategies including sight word fluency and reading comprehension had the experimental group of learners outperform learners in the control group (van Staden, 2016). Such studies show the effectiveness of strategies based on the simple view of reading. In this study learners reading ability will be assessed with the understanding that $R=D \times C$.

2.2.4 Translanguaging framework

South African classrooms are largely linguistically diverse and the use of monoglossic pedagogies has failed to enable epistemic access for multilingual learners. In addition, reading literacy teaching practices have always been biased towards a monolingual orientation to the exclusion of multilingual learners' existing linguistic and cultural repertoires (Makalela, 2015b). A model that is inclusive of learners' existing linguistic and cultural repertoires as well as enable epistemic access for multilingual learners is translanguaging. A plethora of studies has shown the efficacy of translanguaging pedagogy in linguistically diverse classrooms globally (see, Garcia, 2009, Pacheco & Miller, 2016, Creese & Blackledge, 2010, Wei, 2011, Cenoz & Gorter, 2015, Stille, Bethke, Bradley-Brown, Giberson & Hall, 2016).

The term 'translanguaging' was coined in Welsh by Cen Williams who defined it as the pedagogical practice in bilingual classrooms of deliberately changing the language of input from one language and the language of output being another language (Garcia & Wei, 2015, Wei, 2011). Garcia (2009) further defines translanguaging as the act performed by bilinguals of accessing different linguistic features or various modes of autonomous languages, in order to maximize communicative potential. The definition of translanguaging provided by Garcia (2009) encompasses codeswitching which is a term that is presently popular in South Africa.

Furthermore, translanguaging is defined as a concept that builds on the psycholinguistic notion of 'languaging' which refers to the process of using language to gain knowledge, to make sense, to articulate one's thought and to communicate about using language (Wei, 2011). Wei states that translanguaging brings together the different dimensions of multilingual language users' personal history, experience and environment, their attitude, belief and ideology, cognitive and physical capacity into one coordinated and meaningful performance, and making it into a lived experience (2011). The multilingual classrooms have the capacity to become translanguaging spaces where the multilingual learners' dimensions are used to optimise learning as well as to make the learning process more pleasant for learners. A separatist view of language has been adopted in South African schools as languages are classified as 'home languages', 'first additional language' and 'second additional language'. This separatist view does not fit the socio-linguistic realities of the majority of speakers in the 21st century instead, the classrooms of multilingual learners should be characterised by the discursive practice of 'languaging' (Makalela, 2015b). Translanguaging spaces embrace two concepts, namely creativity and criticality whereby 'creativity' refers to the ability to choose between following and flouting rules and norms of behaviour, including the use of language and 'criticality' refers to one's ability to use available phenomena, to question and problematize received wisdom, and to express views adequately through reasoned responses to situations (Wei, 2011). Creativity and criticality are both considered to be part of the 21st century skills that learners ought to acquire which are skills that learners need in order to succeed in work and life (Ledward & Hirata, 2011). In a translanguaging space learners are empowered to be active participants in the learning process. In addition, through

translanguaging, learners consciously construct and constantly modify their socio-cultural identities and values (Wei, 2011).

Translanguaging is a pedagogical strategy that has implications for learners and teachers alike. For learners, translanguaging creates the ability for students to use their full linguistic and semiotic repertoire to make meaning, on the other hand, for teachers it is a pedagogical practice that is transformative (Garcia & Wei, 2015). Noteworthy is that new language practices can only emerge in interrelationship with old ones, without competing or threatening an already established sense of being that 'languaging' constitutes (Garcia & Wei, 2015). As a result what learners already know plays a role in their ability to learn new language practices. Learners are able to view their way of communicating (semiotic and linguistic repertoire) as a tool in the learning process and understand that who they are matters in the process of meaning making. Translanguaging is important for learners due to a number of reasons which are identified by Garcia and Wei (2015) which include:

- a. Mediate learners' identities
- b. Mediate their cognitive complex activities
- c. Embrace positioning thus creating academic identities and invest in learning
- d. Develops integration of new language practices into one linguistic repertoire
- e. Emergent bilinguals engage texts whose languages they are not familiar and show what they know about a text and can make meaning
- f. Metatalk, metacognition and whispered private speech

Based on the benefits listed above, it is evident that translanguaging has the ability to create a pleasant learning environment in which learners are active participants. The languages which learners speak become an integral part of the learning process and are not seen as a hindrance or a barrier for learning. Learners are able to express what it is that they know and what they are learning during lessons. In addition to its benefits for communication, translanguaging is applied in education as a means of reinforcing one language using another. Translanguaging not only promotes deeper understanding of content, but also develops the weaker language in relationship with the one that is more dominant (Garcia & Wei, 2015).

Furthermore, translanguaging addresses the monolingual bias that has been entrenched in education. Garcia (2009) highlights the issue of monolingual bias:

Children who come to school speaking in ways that differ from the language practices of school are often stigmatized... this is so whether the child comes to school as a monolingual student speaking in ways different from those of the school, or whether the child engages in bilingual practices that differ from the monolingual practices that the schools most often impose. (p. 140)

Translanguaging is a necessary response to the monolingual and monoglossic language practices imposed in schools which limit learners' educational and life opportunities. Garcia and Kano (2014) state that:

Translanguaging is a process by which students and teachers engage in complex discursive practices that include ALL the language practices of ALL students in a class in order to develop new language practices and sustain old ones, communicate and appropriate knowledge, and give voice to new sociopolitical realities by interrogating linguistic inequality. (as cited in Garcia & Wei, 2015, p.225)

Translanguaging as a framework breaks down linguistic boundaries and focuses on what people do with languages. It is centred on the practices of bilinguals that are readily observable in order to make sense of their multilingual worlds (Garcia, 2009).

Translanguaging is a relatively new concept that is essential in diverse and multilingual contexts such as South African classrooms. Teachers use codeswitching as a means of dealing with language barriers, however, codeswitching is only an instance of translanguaging and has been found to enhance cognitive skills for nonlanguage subjects like mathematics and science (Garcia, 2009). What is concerning is that the low literacy rate in South Africa persists. The following issue highlighted by Garcia is prevalent in South Africa:

... language minority children are often taught in a language they do not understand - usually a colonial language that has now increased in importance because of globalisation... educating children in a language they do not understand usually leads to educational failure... if the teacher does not maximise communication using the children's language practices, failure in communication and education is sure to occur. (2009, p.152)

The attraction to translanguaging is its effectiveness within the classrooms in South Africa where learners are able to use what they know (the languages they speak daily) to understand the topics covered in the classroom. It is evident that in addition to effective communication translanguaging gives learners epistemic access. Noteworthy is that when the understanding of a language is limited, so will its use (Bakhtin, 1981). Translanguaging is important in ensuring that the use of languages does not stay limited and thus challenges teachers with linguistic insecurity to be open to learning from learners.

The importance of translanguaging for learners has been discussed above, and this section focuses on the importance of translanguaging for teachers. Translanguaging allows for teachers to engage individual learners holistically and is a way of differentiating instruction to ensure that all learners receive the appropriate linguistic input, producing the adequate linguistic output and are cognitively involved (Garcia & Wei, 2015). Through translanguaging, teachers know more about their learners and may use the pedagogic strategy to address linguistic barriers in a manner that is effective for individual learners. “Teachers use translanguaging as a scaffolding approach to ensure that emergent bilinguals at the beginning points of the bilingual continuum engage with rigorous content, access difficult texts and produce new language practices and new knowledge” (Garcia & Wei, 2015). It is evident that translanguaging should then have implications for learners’ academic performance. Teachers can expect that, when used effectively as a pedagogic tool, translanguaging may improve learners’ performance based on how they will be able to engage with texts and content. This necessitates that teachers must know how to use translanguaging in their classrooms so that it can be used to its full advantage. Due to learners taking control of their language practices in order to access texts and knowledge, teachers then take the role of a facilitator and are able to design project-based instruction and group collaborative groupings to maximise translanguaging to learn (Garcia & Wei, 2015). Lessons are then learner centred instead of teacher centred. Garcia and Wei state that:

teachers’ translanguaging practices not only acknowledge the use of all students’ language practices as a resource... but in so doing also entail a commitment to multidiscursivity... that includes students’ discourses, concerns and topics of interest... a teacher who uses translanguaging as pedagogy participates as learner, that is she adopts a multivoicedness... (2015).

In addition, translanguaging enables teachers to cultivate a culture of Ubuntu which is the African cultural and epistemological conception of being which propagates a communal orientation and continuum of social, linguistic and cultural resources and denotes the interconnectedness of all human existence (Makalela, 2014) within classrooms through the collaborative work that learners take part in. In diverse classrooms learners' linguistic repertoires come together. "... The use of translanguaging approaches disorganizes ethno-linguistic divisions and separatist ideologies of the past and creates optimal opportunities for pedagogy of integration, which liberates historically excluded languages and affirms the fluid linguistic identities of multilingual speakers" (Makalela, 2014). This is important for the South African context that is linguistically diverse and has a history of segregation. The term 'ubuntu translanguaging' unifies participants in their translanguaging spaces.

Another implication for teachers that is held by translanguaging is that of creativity and autonomy over the classroom which stems from the understanding of learners' linguistic and semiotic repertoires. This is possible through an understanding of three categories that teachers can apply when using translanguaging (Celic & Seltzer, 2012 as cited in Garcia & Wei, 2015); namely, teacher attentiveness to meaning making, teacher use of classroom resources for translanguaging and teacher design of classroom and curriculum structures for translanguaging. Teachers are able to use what they know about learners to discern how to use translanguaging both appropriately and effectively, teachers are able to have learners be active participants in the learning experience by creating their own classroom resources through translanguaging as was done in a study by Pacheco & Miller (2015).

The translanguaging model is one that speaks to the multilingual context of South African schools and proposes a way of dealing with the language barriers that affect the teaching and learning experience in classrooms and improve learners' reading comprehension. It's efficacy in developing literacy in South Africa continues to be a space that needs to be evaluated.

2.3 Empirical studies on reading in multilingual contexts

A number of studies have been conducted both globally and in South Africa that are related to multilingual education and how it develops literacy among primary school learners. This literature review focuses on studies that are related to the present study and discusses, in

detail, how each perspective relates to the present study as well as how they present knowledge gaps for the South African context and present ways in which this study may fill the existing knowledge gaps.

2.3.1 Early Grade Reading

The beginning of a learner's schooling from grade one is initiated by learners learning how to read (early grade reading). Empirical research on early grade reading in countries with low literacy (including South Africa) has shown the issues pertaining to literacy are related to how learners are taught to read in foundation phase and have highlighted learners' results, teachers' understanding of teaching reading as well as the implications for in-service teacher training (see Spaul et al, 2016, Abadzi, 2017, Zimmerman & Smit, 2014). The highlighted issues in the research call for a pedagogical strategy that tackles issues related to early grade reading that will be implemented by educators.

Presently the literacy rates in South Africa are a concern. A study conducted by Spaul et al. (2016) investigated the cause of the weak performance of South African learners in literacy and numeracy. The study focused on the foundation phase learners. Part of the study involved a close study of the data from the Annual National Assessment (ANA) as well as interviews with teachers. In the report Spaul et al (2016) highlight some of the studies which have provided data revealing some of the literacy issues related to early grade reading in South Africa including the PIRLS (2011) which found that one in three grade four learners could not demonstrate basic reading skills in their home language (2016). Based on the findings of the study, Spaul et al. (2016) argued that early reading in South Africa is not good and that children are not reading well. The study concluded that two of the five identified causes are language issues and weaknesses in the instructional core that is teachers' content knowledge as well as their pedagogical skill (Spaul et al., 2016).

In addition to studies on early grade reading, Abadzi (2017) focused on how reading should be taught and juxtaposed this against how learners are being taught in the early grades. Globally, countries and or regions that have low literacy have had a number of interventions that serve the purpose of developing literacy in the respective countries. Abadzi (2017) highlights issues with some of the early grade reading programmes for low- income populations and argues that the results for these programmes are disappointing. Firstly,

English paradigm and middle-class biases caused for the vast majority of reading research to be conducted in English which led to research findings being inappropriately being generalised to consistent orthographies. Secondly, specialists trained for the needs of English, the five pillars of reading (phonemic awareness, phonics, fluency, vocabulary and comprehension) exclude pattern analogies that are less useful in English (Abadzi, 2017). It is evident the home languages of those who are meant to benefit from the interventions were not considered in great depth leading to the issues that are identified by Abadzi (2017). The programmes do not reflect or relate to the realities of the learners.

Abadzi brings the scientific aspects of reading to the fore and discusses the cognitive processes that take place in early grade reading. "The prerequisite for comprehending volumes of text is parallel-processing of letters. This happens when the letter-by-letter decoding function moves to the visual word form area of the brain, which recognises words as if they were faces" (Abadzi, 2017, p.320). In her paper Abadzi (2017) states that the decoding is possible even if the reader does not understand the language being decoded. However, the issue in South African schools is that teachers do not transition from decoding to reading for comprehension. "Since teachers assume that learners will be able to comprehend when they can decode, little attention is paid to reading comprehension, therefore the transition from decoding syllables or words on a chalkboard or to meaningful reading activities using extended texts does not happen easily" (Pretorius & Currin, 2010 as cited in Zimmerman & Smit, 2014, p. 1). On the other hand Abadzi (2017) emphasises importance on decoding arguing that 'decoding' should not be separated from 'reading' and that comprehension is not the prerequisite for reading. There is an extensive amount of importance being placed on decoding which on its own is not sufficient for the development of literacy. As with the study conducted by Spaul et al. (2016), Abadzi highlights the issue of instruction or pedagogy as a contributor to low literacy performance.

The issue of language in early grade reading is one that is highlighted in the studies above. Of equal importance is children learning to read in their mother tongue, the importance of this is discussed by Zimmerman and Smit (2014): "The focus on decoding text in the primary language essentially means that non-English learners have most likely not yet mastered reading comprehension skills in their vernacular" (p. 2). In contrast, Abadzi (2017) states that while there is higher performance when students learn reading in their local languages it is

unclear whether the higher performance is as a result of language or orthographic consistency of local languages. What the empirical research discussed shows is that language plays a role in reading development.

In general, the studies point to the role of teachers in developing early grade reading through the use of effective instruction. The level or quality of teachers' education plays a significant role in learners' literacy development. "Low-income students would perform much better if they were taught by highly educated teachers, who can instantly pull from their long-term memory a long string of activities and adapt them to individuals" (Abadzi, 2017, p. 331). Secondly, the studies conclude that language plays a role in the low literacy performance in early grade reading. While the findings of the studies are important in understanding the issues that affect early grade reading, very little is known about the efficacy of translanguaging intervention as an alternative tool for developing the literacy of multilingual learners. The present study focuses on assessing the efficacy of a strategy that could solve for both the language and pedagogical issues that affect the early grade reading performance by assessing the efficacy of translanguaging.

2.3.2 Progress in International Reading Literacy Study (PIRLS)

South African learners have participated in a number of benchmarking assessments (including the Annual National Assessments) which have been used by education stakeholders to determine where South African learners are in terms of the benchmark standards as well as to identify areas of concern and lastly, to compare and contrast the learners' results.

The Progress in International Reading Literacy Study (PIRLS) is a study that South Africa has participated in since 2006 as a means of assessing its learners against other countries. The learners who participate in the study are in grades 4 and 5 which are grades in the intermediate phase. The literacy objectives of PIRLS are firstly, to assess how well South African grade 4 learners read and to identify possible associated contextual factors and secondly, to compare the reading literacy of grade 4 South African learners both internationally and nationally for all eleven official languages (Howie, Combrinck, Roux, Tshele, Mokoena, & Mcleod Palane, 2017). The data in the study is collected through learners' written assessments in the form of an assessment booklet that has two texts (one literary fiction text and an informational non-fiction text) and contextual questions. The assessments

were written in the language of teaching and learning (LoLT) used from Grade 1-3 at the learners respective schools. To gather the contextual information, parents, principals, teachers, learners and the national department of education are given questionnaires to complete.

The PIRLS (2016) findings revealed a number of things about the literacy of the 12 410 South African Grade 4 learners who wrote the assessment. One of the most concerning of these findings is that South Africa was placed last out of all fifty countries that took part in the study. There is a gap of 260 points between South Africa and the Russian Federation which is the highest performing country. Furthermore, South Africa had three hundred and twenty points which are pointedly below the PIRLS centre point of 500. Learners from the schools in the townships of South Africa showed low achievement that was significantly lower than that of learners from medium city or large towns (Howie, et al., 2017). It is evident from this finding that the setting of a school does (to a certain extent) factor in learners' literacy. Another factor related to the context of the study is that of language. Majority of the learners speak the language they were assessed in at home while 6 % of the learners said that they never spoke the language of the test at home. Noteworthy is that only 21% of the learners who wrote the test in English, spoke English at home. This a small percent that highlights how much English as a subject is featured in the lives of learners who do not speak it as a home language.

PIRLS international benchmarks provide an indication of what is that learners were able to perform and what they were unable to perform. Howie, et al. (2017) outline the implications for the benchmarks as follows:

Learners who did not reach the lowest benchmark which is below 400 points cannot read for meaning or retrieve basic information from the text to answer simplistic questions. Low international benchmark (400-474): can read to locate and retrieve explicit information. Intermediate benchmark (475-549): begin to interpret and identify obvious reasons events in the text as well as giving basic explanations for actions or information (p.4).

The guideline for the benchmark shows the implications for the results attained by South African learners. Seventy eight percent of South African grade 4 learners were not able to reach the lowest benchmark (Howie, et al., 2017). This raises concerns for how exactly

learners were then engaging with texts that were written in a language that they were able to speak. Could the learners even decode what was on the texts? The results show that they may have found decoding challenging. Using the questionnaires the researchers were able to get information on the background factors that are associated with achievement. Factors such as the school environment, classroom contextual factors and the learners' home environments (Howie, et al., 2017).

A number of key findings were highlighted by the study. PIRLS (2016) showed that learners writing in African languages attained the lowest mean scores. This shows that the development of literacy in African languages ought to be improved and not have too much emphasis on English. Howie, et al. state that the study found that more than eighty percent of learners who were tested in an African language did not reach the lowest benchmark (2017). Furthermore, the study showed a decline in the number of learners who reached the High and Advanced Benchmark.

Another key finding in the PIRLS (2016) study is about the manner in which teachers develop learners' reading comprehension skills. In South Africa (like most of the countries in the study) more time is spent identifying the main ideas of what they have read and learning how to locate information within a text while less time is spent making generalizations and drawing inferences (PIRLS, 2016). Making inferences and generalizations is one way of getting learners to show their understanding of the meaning of the text, less time spent on this may have implications for how well learners understand the meaning of texts.

Generally, this study highlights the literacy issues in South African schools listing language, instruction and other contextual issues as the possible causes for the devastating results attained by South African learners. The present study focused on a possible solution that may improve the literacy challenges of learners by assessing the translanguaging effects in Grade 3 and 4 reading comprehension classrooms.

[2.3.4 Translanguaging as a pedagogical strategy](#)

Enhanced epistemic access research on the value of translanguaging on educational achievement has shown that it improves access to knowledge and overall performance (e.g., Spaull, 2016; Makalela, 2015; Adadzi, 2017; Madiba, 2014; Mgijima & Makalela 2016). This

means that there are no known negative effects of translanguaging for learners in schools. For example, a study by Makalela (2015) was carried out among grade 5 learners in a rural school in Limpopo province, South Africa. As part of the translanguaging intervention, learners were conditioned to read a text in their home language, Sepedi, and discuss the contents in English and Sepedi. The orally retold stories were later written in English. After a 3 months practice of using Sepedi and English as languages of input and output at the same time, the results showed a marked improvement in reading comprehension gains where both English and Sepedi gained significantly. As a result, the study concluded that translanguaging is effective in enhancing learners' access to knowledge.

In another study, Mgijimi and Makalela (2016) focused on translanguaging by examining the efficacy of concurrently using the learners' home language and first additional language in reading development among bilingual isiXhosa-English readers in a rural school in the Eastern Cape, South Africa. The study found that translanguaging intervention contributed to learners' improved performance in how they used background knowledge when drawing inferences rather than relying on texts. This study shows how translanguaging positively impacted reading comprehension in the learners.

In the third study discussed in this chapter, (Makalela, 2015b) assessed the effects of translanguaging for multilingual development in student teachers. The study was a practice-based enquiry involving 21 Sepedi additional language student teachers from the Wits School of Education, University of the Witwatersrand (Makalela 2015b). The Sepedi language course ran for one year and during this year learning and use of Sepedi was done both inside and outside the classroom. For example in order to increase the student teachers' vocabulary and engagement with Sepedi, social media was employed. A Facebook group was created wherein students got a multilingual space to extend language beyond the classroom. In addition they used multilingual blogs in which they made entries in Sepedi, their home languages and English (Makalela, (2015b). In the classroom the instructor used translanguaging where students used their linguistic repertoires to communicate during the lessons. The instructor used a strategy referred to as contrastive elaboration in which students crisscross between all (or known) languages and multilingual spaces to extend their understanding of concepts or ideas introduced in the target language (Makalela, 2015b).

The study found that there was a fast-tracked development of vocabulary, speaking and language competencies through translanguaging pedagogic approach (Makalela, 2015 b). Secondly, students developed positive associations with Sepedi and they found that cultural ethos can be extended beyond discrete language boundaries. Students observed that there are interconnections between sister language varieties. The study argues that the pedagogy of African languages can be aligned with a cultural and epistemological conception of being (Makalela, 2015b). The importance of translanguaging transcends epistemic access but also enables social justice by disorganising ethno -linguistic divisions and separationist ideologies of the past and creates optimal opportunities for pedagogy of integration and affirms the fluid linguistic identities of multilingual speakers (Makalela, 2015b).

This study shows the efficacy of translanguaging in an African language classroom. It shows that the advantages of using the pedagogic strategy transcend the epistemic access, however, it also unifies previously separated linguistic groups in an academic domain.

In addition to the studies by Makalela is a study that assessed the use of translanguaging as a pedagogical strategy in linguistically diverse literacy classrooms in the United States of America. Pacheco and Miller (2015) share examples of pedagogies that productively engage learners' home languages in the literacy classroom. Of the three examples provided in the ethnographic study, teachers use learners' linguistic repertoires as a scaffold. The first classroom observed is a Grade 3 classroom during a lesson on features of an information text. In teaching learners about text features, the teacher uses newspapers written in Spanish, Chinese, Arabic and English. The features that learners had to identify were, *title*, *author*, *caption*, *picture*, *map* and *chart*. The newspaper articles were handed out to learners randomly and some learners got articles in their languages while others did not, however, the learners worked in pairs during this task. During a classroom discussion the teacher selected a Spanish-speaking learner to read the article of the text. This is an example of how the teacher used learners' linguistic repertoire during a lesson. By the end of the lesson, learners observed that despite the language the articles were written in the features were the same. Ms. Gardner used students' heritage languages to build conceptual understandings about the overall purpose of text features (Pacheco & Miller, 2015).

The second lesson that was observed was a grade 2 bilingual classroom. Learners were summarising an English text so as to demonstrate their reading comprehension skills (Pacheco

& Miller, 2015). The tasks given to the learners varied. Firstly, they had to individually whisper-read the text, then learners discussed the story in pairs and were given the option to do so in English or in Spanish (Pacheco & Miller, 2015). The teacher gave learners the opportunity to use a language of their choice without the concern of the languages contaminating each other. After their discussions, learners were instructed to write about the characters as well as to write a summary. Both the compositions were written in both English and Spanish. This Grade 2 lesson is an example of an engaging lesson where a teacher gives learners the opportunity to use languages simultaneously and enhances the chances of content mastery. “Encouraging students to speak and write in their home languages can give them opportunities to clarify misconceptions in texts, tap into their background knowledge, and demonstrate their understanding” (Pacheco & Miller, 2015).

Both observations led the researchers to conclude that through translanguaging pedagogies, teachers learn about learners’ experiences outside the classroom and can integrate those into the lessons and translanguaging pedagogies hold tremendous potential for creating classrooms rich with language, culture, and multiple perspectives that encourage both student and teacher learning (Pacheco & Miller, 2015).

Generally, these studies show that translanguaging is effective in enhancing knowledge access and valorizing ways of knowing that are particular to multilingual learners. While these findings are important in advancing translanguaging as an alternative tool for educational success of multilingual children, very little is known to date, however, about how these findings apply in lower grades (particularly in Grades 3 and 4). The present study takes this issue forward and assess translanguaging effects in lower primary school reading comprehension classrooms.

2.3.5 Oral Classroom Interactions

As a pedagogical strategy, translanguaging has implications for how oral classroom interactions will take place. This section focuses on ethnographic studies that show the effect translanguaging has on oral classroom interactions.

Researchers observing classroom interactions have revealed that translanguaging improves oral classroom interactions (for example Stille et al., 2016, Zimmerman & Smit, 2014). A study by Stille et al. (2016) discusses three points: Firstly, the need for shifting teachers’ attitudes

and perspectives about language education, secondly, the importance of understanding learners' bilingual learning processes and lastly, the value of home languages and translanguaging for content curriculum teaching and learning.

The study observed grade 7 and 8 multilingual classrooms where 35% of the learners speak a language other than English at their homes in Ontario, Canada. In order to find a solution the first step for the researchers was to get teachers to understand the learners better. This was done through getting teachers to interview learners on how they could best help them. According to the study, teachers found that the learners were having issues with understanding the language of instruction (van Viegen Stille et al., 2016).

Thirty five percent (35%) of the grade 7 and 8 learners in the study spoke a language other than English at home furthermore, 50 languages and 60 countries were represented. As a result of their findings, the teachers started encouraging learners to use their first language (L1) and the teachers actively began to support learners' bilingualism and bilingual learning process during class time (Stille et al., 2016). Learners began to volunteer to share their answers and engaged in group discussions in languages that they understood better (Stille et al., 2016). Based on the teachers' findings from the interviews conducted with their learners, the teachers came up with multilingual classroom practices to develop learners' comprehension and vocabulary. "Teachers encouraged students to engage in translanguaging, using their L1 along with English, to build conceptual knowledge, support comprehension, generate interest and peer interaction, and scaffold writing and discussion" Stille et al., (2016). Consequently, teachers were able to use translanguaging in their classrooms not only in language classes but in non-language classrooms as well for example, learners created multilingual science and maths concept anchor charts and multilingual word charts for academic vocabulary learning.

Furthermore, studies conducted by Makalela (2019) and Hansen-Thomas, Stewart, Flint and Dollar (2020) revealed further ways that translanguaging contributed to oral classroom interactions. After teachers attended a workshop on translanguaging, one of the teachers was observed and it was found that the teacher used multiple language greetings, there was a deeper comprehension of the content taught and there was multilingual concept development (Makalela, 2019). This shows that translanguaging pedagogy is inclusive of learners linguistic repertoire. Secondly, Hansen-Thomas, Stewart, Flint and Dollar's study in

2020 highlighted that translanguaging allows for learners to be resources for learning as learners use their home languages to translate concepts and to make meaning of English concepts and were able to teach their teachers their home language (Spanish) in the production of multilingual resources.

These studies show how translanguaging is effective in improving oral classroom interactions and making lessons more engaging for learners as well as aiding them to understand concepts. While the findings show improvement in oral classroom interactions in grade 7 and 8 classrooms, it is unclear how the oral classroom interactions can be improved through translanguaging in Grade 3 and 4 South African township classrooms.

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2.3.6 Teacher perceptions

Research has shown the role of the teacher in improving literacy to be crucial (for example, Zimmerman & Smit, 2014, Stille et al., 2016, Spaul et al. 2016, Abadzi, 2017). What teachers believe, understand and know about pedagogical strategies matters because this has implications for how they will facilitate learning in their classrooms. Studies have highlighted the importance of empowering teachers and providing training that they will understand and implement.

The study by Stille et al., (2016) highlights the importance of teachers' perceptions by shifting their attitudes, perspectives and beliefs about language in education. Subsequently, teachers were able to make changes that accommodate learners' languages. The case study was conducted in a preschool to Grade 8 school in rural Ontario. Teachers became researchers by observing 21 learners. Teachers discussed teachers' thoughts about teaching to learners' needs and understanding their teaching needs. After teachers reflected on learners' needs they were then able to find ways to improve teaching and based on their understanding of

learners. Noteworthy, is that not all teachers were open and willing to participate which may have a negative impact on the learning experience of the learners in those teachers' classrooms. Despite this issue, teachers used their findings to implement change in their classroom practices so as to enable content mastery across different subjects as well as building learners pride for their home languages in the classroom. Teachers began to support learners' bilingualism and bilingual learning processes during class time (Stille et al., 2016).

In another study that gives insight on the role of the teacher, Zimmerman and Smit (2014) focused on grade 4 South African classroom reading comprehension development practices. In this study findings from Progress in International Reading Literacy Study (PIRLS) 2006, are used for a juxtaposition of South African schools that performed below the international benchmarks and schools that performed at the benchmarks in terms of how teachers develop learners' comprehension. Lesson observations were conducted at four different schools whose PIRLS results varied. The key findings revealed that teachers whose learners were exposed to varied types of comprehension questions performed better than those whose teachers focused more on literal questions. In addition, schools that gave learners written activities performed better than schools that had less written activities (Zimmerman & Smit, 2014). Noteworthy is that the schools that performed below the PIRLS benchmark had more English second language learners. "Without pedagogical content knowledge and an inherent understanding of how to develop and assess learners' reading comprehension, the vicious cycle of poor literacy outcomes for South African learners will continue" (Zimmerman & Smit, 2014).

Both studies have shown the role of teachers' perceptions, pedagogical skills and content knowledge in improving learners' literacy however, little is known about the perceptions of South African primary school teachers' perceptions and understanding of translanguaging as a pedagogical tool for improving reading comprehension.

The studies provide insight on classroom practices, however, more information of translingual classroom pedagogies needs to be acquired as translanguaging is at its infancy in South Africa.

2.3.7 Conclusion

The studies reviewed in this chapter have shown the significance of multilingual education globally as well as the efficacy of translanguaging as a pedagogical tool that provides multilingual learners with epistemic access. In addition, the chapter reviews the PIRLS report which highlights the key literacy issues faced by South African learners. While the studies provide insight on translanguaging, gaps in the existing body of knowledge on the efficacy of translingual treatment at the end of foundation phase and in Grade 4 are yet to be filled. The present study seeks to fill these knowledge gaps.

3. Chapter 3: Methodology

3.1 Introduction

The aim of the study was to investigate the efficacy of teaching in more than one language and how this can develop learners' literacy. The study compared pre- and post-learner performances in reading comprehension levels which include literal and inferencing. In addition the study focused on teachers' teaching practices pre- and post-treatment on translanguaging pedagogy. Lastly, the study investigated teacher perspectives by conducting interviews with teachers.

3.2 Design

The design that was employed in this study is concurrent mixed method design. This design was employed in order to assess the efficacy of translanguaging both qualitatively and quantitatively simultaneously as well as to provide both depth and breadth to the study. "The purpose of concurrent triangulation designs is to use both qualitative and quantitative data to more accurately define relationships among variables of interest" (Castro, Kellison, Boyd & Kopak, 2010, p.7). In addition to the above mentioned advantage of triangulation, Paltridge & Phatiti (2015) highlight that, the use of more than one method reduces the chance of systematic bias in a qualitative study as researchers come to the same conclusion about a phenomenon using different data collection methods, the convergence offers strong validity evidence.

Due to sensitivities and the paucity of research related to the efficacy of translanguaging in Grade 3 and 4 reading comprehension it is important that the data was collected using different methods and drew on the strengths of each of the methods. "... the understanding of the operation of complex environments- such as classrooms- lends itself to mixed methods research, because combining several research strategies can broaden the scope of the investigation and enrich the researchers' ability to draw conclusions" (Paltridge & Phatiti, 2015). While the quantitative method provided data on the learners' performance, the qualitative data provided information regarding the context, namely, the classroom practices and teachers' perceptions.

The qualitative data provided a contextualised approach to the study through an ethnographic enquiry that measured the teachers' classroom practices as well as their metacognitive methods. The classroom practices highlighted the 'instructional context', which concerned influences of the teacher, learners, curriculum, and teaching methods as well as the 'social context', which concerns the arena for learners and the two interdependent contexts interact with the complex process of learning (Paltridge & Phatiti, 2015).

The classroom practices provided information on how learning took place in the participating schools. It became evident, based on the classroom practices, which pedagogic strategies were used by teachers and the researcher was able to detect how the pedagogies had changed (or stayed the same) after the translingual treatment. In addition to teachers' practices, classroom observations gave insight on how learners responded to the pedagogic strategies used by teachers. The teachers' metacognitive methods informed how they applied their pedagogic strategies, due to this reason, understanding teachers' thinking about their teaching gave the study qualitative data relating why certain classroom practices were followed. This may have had implications for learners' performance and dealt with one of the aims of the current study which was to evaluate teachers' metacognitive reflections on translanguaging pedagogy. "... Discerning what the various constructs mean in a particular setting necessitates qualitative methods that can uncover participant interpretations..." (Paltridge & Phatiti, 2015).

The study employed longitudinal (qualitative and quantitative) research elements as schools were visited on a number of occasions and the participants (learners) wrote pre-treatment assessments and the teachers were interviewed pre and post-data collection. The longitudinal research enabled me to observe changes or stability in learners' reading comprehension performance, teachers' perceptions as well as classroom practices (pre and post-data collection) (Paltridge & Phakiti, 2015).

The quantitative data was collected on two occasions at each school. The first round of quantitative data collection involved learners writing multilingual comprehension assessments. These assessments were used for diagnostic purposes as the results showed the learners' multilingual reading comprehension. Translingual treatment was then given the form of workshops for teachers and teachers were given time to implement what they learned from the workshops. After a sufficient period of time, the schools were revisited and

the learners wrote the multilingual comprehension assessments again so that the results could be compared so as to measure the efficacy of translanguaging treatment measures on reading literacy trajectories in the two participating schools.

The quantitative approach of the research was a quasi-experimental design. Intact classrooms were used and there was no randomisation. The challenge of random assignment in a classroom setting was resolved through the use of a quasi-experimental design (Paltridge & Phatiti, 2015). The advantages of using the quasi-experimental design include, establishing cause-effect relationships and evaluating educational innovations (such as translanguaging), because the studies are conducted in authentic learning environments using genuine class groups preventing the reduction of external validity and studies that for the effects of the main initial group differences are usually seen to deliver scientifically credible results (Paltridge & Phatiti, 2015). The groups were intact and were moved from their original classroom groups. In addition the study compared the results between two schools. The study included both within and between experimental measures because schools had different treatments in order to identify optimal conditions in which translanguaging enhances reading. The within experimental design focused on the pre and post-test written within each school.

3.3 Population/Participants

The study involved both learners and teachers. The learners assessed were in grade 3 and 4. These are the transitional grades in primary school. Grade 3 is the last year of the foundation phase while Grade 4 is the first grade in the intermediate phase. The Grade 3 learners should be exposed to multilingual education making it a good time to assess multilingual education's efficacy. The South African language policy states that from Grade 4 learners are taught in English which suggests that the degree of multilingualism may decrease in a number of contexts, however, there is a paucity of research that gives light to this topic.

3.3.1 Learners

This study involved a total of 126 learners from two primary schools in Gauteng. There were 66 grade 3 learners in total and 30 Grade 4 learners from each school. The learners in this study are between the ages of 8 and 10. The learners are from townships in Gauteng, Atteridgeville and Soweto, which are multilingual contexts. The languages found in the two townships include, Sepedi, Sesotho, Xitsonga, IsiZulu and IsiXhosa. It is worth noting that the

school in Atteridgeville includes learners who speak French and Swahili. This shows that the learners in this study were exposed to a number of languages daily both at school and outside of school. The schools are government schools that rely heavily on government funding. Both the schools use IsiZulu and English. The learners that participated in this study are multilingual grade 3 and grade 4 learners. In Grade 3 learners were still taught in their home languages as this is the last grade for foundation phase and the learners in Grade 4 transition not only into a new phase (intermediate phase), however, they were also taught in English which was not the learners' home language.

3.3.2 Teachers

The study involved 4 teachers from each school. The teachers both have over 10 years teaching experience and were able to reflect on how teaching was pre and post the translanguaging treatment. The teachers are multilingual like the learners, however, they do not speak Swahili or French even though one of the schools has learners who were not born in South Africa and spoke languages that are not part of the eleven official South African languages.

3.4 Sampling

The study used multistage sampling procedures. Firstly, the schools were chosen purposively from a list of schools provided by the department of basic education. The schools met the criteria of being government schools that are situated in two townships in Gauteng province and are multilingual. The main languages used academically in the schools had to be IsiZulu and English. The first selection is purposive.

Secondly, the selection of both the Grade 3 and Grade 4 participants was done by using convenient sampling where one class was chosen from each school. Lastly, the selection of teachers was purposive as the teachers had to be willing to go through the proposed treatment and attend workshops.

3.5 Data collection

3.5.1 Instruments

The data was collected using four instruments or tools namely: multilingual comprehension tests, observation protocols, a questionnaire and flashcards. Learners in grade 3 took part in literacy assessments using flashcards with images as well as letters and the grade 4 learners

took part in multilingual comprehension assessments that assessed their literal and inferential reading comprehension skills. I used lesson observation protocols as well as interview schedules to interview the teachers.

Grade 3 Multilingual Comprehension Test

Letter name and sound knowledge in English and isiZulu

Learners were assessed in a room separate from the other participants and their classes to prevent learners from being shy to answer questions in front of their peers as well as to prevent learners from providing an answer similar to the one heard from their peers. Flashcards with one letter on each card were shown to the learners and they had to identify the letter on each flashcard. Before the learners read the letters aloud, they were told in which language they were reading the words in. Learners had to demonstrate their understanding of how the letters sound different when read in English and isiZulu. This assessment tool provided data on learners' decoding skills which are developed in the foundation phase. The system of letter-sound correspondences of a language- is one of the ways in which decoding takes place (Gough, 1993).

Lexical discrimination

A list of words were shown to learners and they were asked to identify words that were real and words that had been made up or do not exist in English and isiZulu. This particular tool assessed learners' ability to decode as well as learners' linguistic comprehension. According to the simple view of reading, when considering an individual's ability to read, one should take into account the individual's ability to decode as well as their linguistic comprehension. This is understood in the formula, $R=D \times C$ (Gough and Tunmer, 1986).

Word reading

Flashcards with one word on each card in both isiZulu and English were shown to learners for them to read aloud. The use of flashcards is another form of assessment that was used to assess learners' ability to decode, however, this decoding assessment differs from that of learners having to identify letters only as learners needed to read whole words. The

assessment of learners' ability to read the sight words in isiZulu and English by decoding focuses on letter- sound correspondences (Gough, 1993). Learners were shown five words in isiZulu which is their Home Language (HL) and five words in English which is their First Additional Language (FAL). The words shown to the participants were monosyllabic words which were chosen purposefully as words that the participants would have been able to recognise based on the activities they had done in their classrooms. The words presented to the participants were chosen on the premise that the participants would have seen the words prior to the study. The words the participants had to recognise in isiZulu were, 'yebo' (yes), 'hleka' (laugh), 'imoto' (car), 'ubaba' (father) and 'inkomo' (cow). In English, participants had to recognise the words, 'boy', 'father', 'train', 'drink' and 'sleep'.

Phonological awareness

Three pictures were shown to learners at a time. The first picture shown to the learners had the target sound. Learners were asked to choose a picture resembling the target sound in the context of two other distractors. Learners were asked to make a phonological judgment on either rhyme or alliteration similarity.

Short term memory span

Learners were assessed on their cognitive ability to recall the order in which pictures were presented to them. This was an important assessment measure used to assess the learners' recall ability, which is a key part of literal comprehension.

Grade 4 Multilingual Comprehension Test

Learners were given two passages. One passage was written in isiZulu and the other in English. Learners read the texts and answered the comprehension questions asked in the assessment. The questions focused on learners recall, inferential and text reorganisation skills.

Observation Protocol

Literacy events were recorded by means of an observation protocol which was completed by the researcher at different intervals during the lessons under observation. Literacy events refers to the actual reading and writing as well as the opportunities to read and write that took place in more than one language during classroom observations.

The observation protocol was divided into three parts. The first part was the first round of a ten-minute observation in which the observer entered the number of times in a sixty second period the participants a) had their eyes on print; b) had their hands on print (including textbooks and exercise books); c) were engaged in writing. This observation was followed by a reflection on the specific classroom practices that took place during the observation. The second part of the observation protocol was a ten-minute observation of the participants which was the same observation as the first part and the last part was a five minute reflection by the observer. The overall classroom observation was conducted for thirty minutes of the lesson to get a general sense of how frequent the learners became exposed to texts during lessons.

A. Eyes on Print

The study sought to find out the frequency at which the participants had their eyes on print. The print observed included the written texts such as the exercise books used by the participants, the posters and flashcards that were on the classroom walls and textbooks. The posters that were on the classroom walls varied in terms of who created them and their sources of origin. Some of the observed classrooms texts which were created by the participants (local texts) and texts which were supplied by the Department of Basic Education (imported texts).

The number of times that the participants had their eyes on print has implications for how often reading was done during lessons on a daily basis as well as how the participants reading automaticity was developed by the incidental reading that took place as well as the intentional reading took place in the classroom. Participants who had print in front of them were bound to read the texts or attempt to read the text as per their teacher's instructions or as a means of getting information.

B. Hands on Print

In addition to observing the number of times that participants had their eyes on print, the study observed the number of times that the participants had their hands on print. Hands on print was a variable that entailed taking note of the number of times the participants touched,

came into contact with or engaged with print using their hands. The print discussed in this study includes notes given to participants by their teachers, textbooks, reading books and their exercise books.

C. Writing

The number of times that participants were engaged in writing activities was observed along with the number of times participants had their eyes on print and had their hands on print in ten minute intervals. The writing referred to in this study includes the number of times participants were prompted to write as well as the number of times participants wrote even in the absence of prompts from their teacher. Participants wrote in their books when copying what the teacher had written on the board and writing their own answers to questions given in an exercise.

During the observations, attention was paid to the languages that the participants were expected to write in. In addition, what they were writing about and the amount of time spent writing was observed.

Observation a

I observed lessons conducted and focused on the classroom practices. I paid attention to the teachers' pedagogical strategies and learners' response to the teacher and completed an observation protocol sheet to assess the Grade 3 lessons.

Observation b

I observed lessons conducted and focused on the classroom practices. I paid attention to the teachers' pedagogical strategies and learners' response to the teacher and completed an observation protocol sheet to assess the Grade 4 lessons.

Active Teaching Rubric

Another part observation protocol was a rubric that focused specifically on the teachers. A number of variables were assessed which included a focus on the teachers' enthusiasm, engaging content, the tasks, teachers' clarity and accuracy, how the teacher responded to the learners or participants as well as the instructional aids used by the teacher. The active

teaching rubric provides data needed to assess and understand how teachers conduct their lessons and facilitate the literacy events that took place during the observations.

Below is an explanation of the variables that the study focused on:

Goal Oriented Teaching

The goal of the lessons observed had to be clear in thirty minutes based on how the teacher was instructing the participants during the lesson. A clearly goal oriented lesson is one in which the teacher ensures that the objectives of the lesson are met regardless of how the participants may derail from the topic due to misconceptions or discussions that begin to shift focus from the lesson topic.

Tasks Challenging

Another variable in the Active Teaching Rubric focused on how challenging the tasks were. The tasks had to challenge the participants, however, not in an overwhelming manner. Challenging tasks require the participants to think and apply their understanding during the both class discussions and independent activities.

Positive Climate

The environment of teaching and learning must be positive for effective learning to take place. The Active Teaching Rubric assessed whether the climate in the classroom was positive for risk-taking and learning to take place. The participants had to be comfortable to ask questions and give answers (even if they were wrong) and for them to feel safe in doing so.

Print Environment

The researcher assessed the degree to which the learners were exposed to text through an evaluation of classroom texts. The variables used for measuring this aspect of incidental reading were (a) text origin, (b) text types, (c) multilingual nature of the texts, (d) relevance, and (e) accessibility.

Questionnaire

A total of four teachers participated in this study. Two of the teachers were Grade 3 teachers and two Grade 4 teachers. Prior to the lessons being observed the teachers were each given a copy of the teacher questionnaire to read before the lesson observation so that they would have an understanding of what the observer would be focusing on during the lesson observation as well as understand what they were expected to be thinking about in relation to their teaching.

The questionnaires that were given to the teachers required them to choose a number that related to their views on a scale of 1 to 4. The following are the variables that the questionnaires focused on:

- Teaching reading
- Reading difficulties
- Linguistic Comprehension
- Reading in English and isiZulu
- Writing in English and isiZulu
- Linguistic comprehension
- Reading comprehension

Treatment

Dialogue on results

The findings from the pre-test written by learners were shared with the teachers and the school principal in a presentation. The implications of the findings were explained to the teachers and the school principals.

Induction on translanguaging

A workshop for teachers was facilitated. Teachers were given an hour long workshop on translanguaging. During the workshop the importance of language in education was highlighted and translanguaging was explained in relation to its advantages as shown by international and South African research.

Follow-up conference

Teachers and principals were invited to an international conference on multilingual education where they learned more about translanguaging and how it is being used in different countries and different South African schools. During the conference, teachers and principals got the opportunity to engage with researchers from different parts of the world and get further information on the efficacy of translanguaging in enhancing epistemic access.

Parent workshop

Parents at the school in Atteridgeville were given a workshop on multilingual education and the importance of reading. This workshop was important as parents got information on how they could improve their children's literacy through a culture of reading at home in their home language.

3.6 Data Analysis

The assessments written by learners were scored. Each assessment was moderated for quality assurance purposes. The learners' scores were entered and analysed both descriptively and inferentially. The grade 3 learners' results were compared to the results of the Grade 4 learners.

The analysis of the learners' results was done firstly, by looking at the difference in the pre and post-data collection results. This analysis has implications for the efficacy of translingual treatment in the schools. Secondly, the results are compared between grade 3 and 4 so as to assess the difference between the literacy in both grades which may have implications for the literacy trajectory. In addition, the data will be analysed per variable so as to indicate how or whether translanguaging affects different aspects of literacy.

The teachers' questionnaires were scored and the scores were entered for analysis. I used measures of central tendencies for descriptive statistics. The inferential analysis was done using the MANOVA method in which I compared means of literacy features. Lastly, I used correlation to measure the relationship between Grade 3 and 4 literacy performance.

3.7 Validity and reliability

The comprehension assessments given to the learners was moderated to ensure that they were correctly pitched as far as the level of difficulty is concerned. The assessments were reliable as none of the learners would have seen the assessments before they wrote the pre-

tests. Three months lapsed before learners wrote the post test. The multilingual assessments were in languages that are used by the school to ensure that no learner was assessed in a language that they had never been assessed in before. The study was externally valid as the same assessment may be used in different parts of the country.

The same observation protocol was used for all lessons observed to ensure that the same classroom practices were being evaluated in different classrooms. All assessment tools were evaluated by my supervisor to ensure that they were reliable.

3.8 Ethical considerations

I applied for ethical clearance to conduct this study from the University of the Witwatersrand, School of Education. In addition I requested permission from both schools and the department of basic education for the study to be conducted.

All participants were informed about the study before writing the assessments and took part in the study voluntarily. Each of the participants' parents were informed about the study and asked to give permission for their sons and daughters to take part in the study at the times stipulated by the schools.

The participants and the schools were informed that they would not be named and would remain anonymous. Each participant was informed that their results as well as their interviews would remain confidential. Teachers were asked to attend workshops and the conference voluntarily. Lastly, the participants were informed that the raw data would be kept under the custody of the supervisor and would be destroyed within a period of 3-5 years.

3.9 Conclusion

The aim of the study was to investigate the effectiveness of using translanguaging treatment measures on reading literacy trajectories in two Gauteng primary schools. The study will fill a research gap regarding the efficacy of translanguaging in early grade reading comprehension and provide insight on teachers' perceptions on translanguaging pedagogy. This chapter of the study described the research methodology that was employed in this study. The present study used a concurrent mixed method design which uses the strengths of both the qualitative and quantitative studies.

4. Chapter 4: Findings

4.1. Introduction

The study aimed to investigate the effectiveness of using more than one language on reading literacy development in two Gauteng primary schools. To achieve this aim, a baseline literacy practices assessment and transitional literacy measures between Grade 3 and 4 readers were carried out to understand systemic reading trajectories that span over time.

This chapter discusses the key findings under the following headings:

1. Literacy events
2. Teachers' metacognitive reflections
3. Grade 3 and 4 learners' literal and inferential comprehension gains in the post intervention phase
4. Multilingual reading development of Grade 3 and 4 learners

In the end, the chapter closes with broader discussions based on data interpretation regarding the effectiveness of translanguaging as a pedagogical strategy.

4.2 Literacy Events

This section provides an explanation of the variables that were observed as literacy events which included the frequency of eyes on print, hands on print and writing. The explanation is followed by a discussion of the findings during the classroom observations.

4.2.1 Frequency of Eyes on Print

Below are the results of the frequency of the participants' eyes on print during the first and second round of the observation.

Round One Grade 3 Results

Table 1: Number of participants with Eyes on Print in first ten minute interval

	Sample Size	Mean	Standard Deviation
School A	36	18	14
School B	30	15	12

Table 1 shows the results in the first ten minutes of the observation. In School A the mean number of learners who had their eyes on print in the first round was 18. On the other hand, the mean number of learners in School B who had their eyes on print in the first round was 15. The mean of both schools was 50 % showing that there was a similarity between the 2 schools.

The standard deviation for School A was 14, while the standard deviation for School B was 12. The standard deviation for both schools was close to the mean number for each school. This is indicative of how the number of learners whose eyes were on print in the first ten minutes of the observation was inconsistent in each school. Learners in both schools read texts as and when the teachers read for the learners and the learners had to follow. In some instances learners would get distracted while following with their teachers and start talking to the learner that was closest to them. At some points learners stopped following after the teacher read a few words. These observations have implications for the impact the teachers had on the learners as well as the learners ability to read. A learner who could not read the words may have struggled to follow the teacher as they read. This observation shows that there was no full engagement (from the learners) in this literacy event.

Round Two Grade 3 Results

Table 2: Number of participants with Eyes on Print in second ten minute interval

	Sample Size	Mean	Standard Deviation
School A	36	16	14
School B	30	15	13

Table 2 shows that in the second round, the mean number of learners who had their eyes on print in school A was 16 and 15 in school B. As with the first round, the print that learners were engaged with was directed by the teacher. Noteworthy is that in the second round, most learners began to focus on different texts. While the primary print was on the board, some learners looked at their books or posters that were on the wall. Their focus was not fixed on the teacher. Furthermore, the mean number of learners who had their eyes on print decreased in school A.

The standard deviation in the second round for School A was 14 and 13 for school B. The standard deviation was similar to that of the first round which shows consistency in how limited the teachers' impact on the learners was in both schools and how the results lacked homogeneity.

The frequency of learners' eyes on print shows that most learners from both schools were engaged with print for the majority of the observed lessons both from teachers' instructions as well as looking at the classrooms' print environment, however, the quality of engagement with the text has not been determined at this point as the learners' ability to decode and comprehend the texts was not observed.

Round One Grade 4 Results

The results presented below are of the 2 grade 4 classes that were observed. Presented in table 3 are the results of the frequency of eyes on print in the first round of the grade 4 classroom observation.

Table 3: Number of participants with Eyes on Print in first ten minute interval

	Sample Size	Mean	Standard Deviation
School A	30	15	11
School B	30	19	11

Table 3 shows the results found in the first round of the observation of grade 4 participants. The sample size for each class was 30 participants. School A had a mean number of 15 participants who had their eyes on print and the standard deviation was eleven 11. School B had a mean number of 19 participants who had their eyes on print in the first round and the standard deviation was eleven 11 which is the same as school A.

The results show that when looking at both schools, over 50% of the participants had their eyes on print during the first ten minutes of the observation. Majority of the participants engaged with print primarily as per the teachers' instructions or as a result of following what the teacher was reading to the class. There was limited independent reading at this point; however, the participants still had exposure to print and engaged with the print. This observation has implications for the participants' reading development. The extent to which this exposure to print will be evident in the participants' results in the assessments that they wrote.

Round Two Grade 4 Results

The following results show the mean and standard deviation in the second round of observations in two grade 4 classes.

Table 4: Number of participants with Eyes on Print in second ten minute interval

	Sample Size	Mean	Standard Deviation
School A	30	18	12
School B	30	17	13

Table 4 is a representation of the results found in the second round of the 10 minute observation of 2 grade 4 classrooms. In a sample size of 30 participants in each classroom the mean number of participants who had their eyes on print in school A was 18 and the standard deviation was 12. The results for school B were similar with a mean number of 17 and a standard deviation of 13.

The results show that in both rounds of the observation, over 50% of the participants were engaged with print. However, what is revealed by the standard deviation is that, like the grade 3 participants, this cohort of participants had limited uniformity in terms of how they engaged with print. In each of the observations there were participants who were not engaged with the print, whether it meant not following what the teacher was reading or getting distracted.

4.2.2 Frequency of Hands on Print

Below are the results of the frequency of the participants' hands on print during the first and second round of the observation.

Round One Grade 3 Results

The table below shows the results from the first 10 minute observation of Grade 3 participants in two schools who had their hands on print. The table shows the mean numbers for each school as well as the standard deviation.

Table 5: Number of participants with hands on Print in first ten minute interval

	Sample Size	Mean	Standard Deviation
School A	36	0.2	0.6
School B	30	27	4

Table 5 shows that school A had a sample size of thirty 36 participants who had a mean number of 0.2 participants who had their hands on print in the first round of the ten minute observation. The standard deviation for school A was higher than the mean as it was 0.6. On the other hand school B had a mean number of 27 and had a standard deviation of 4.

In this first round it is evident that the participants at School A had limited engagement with print for the first 10 minutes of the lesson. There were no books or notes in the participants hands which shows how limited their engagement and exposure to print (within close proximity) was. School B, on the other hand, had a much higher mean showing that the teacher in this classroom had instructed learners to have their books on their desks and ready to use. This instruction consequently resulted in the participants having greater exposure to print that is not only on the walls of the classroom; however, print that is close enough to them to read and write. The standard deviation is significantly lower than that of the mean number of school B. This shows that the number of participants that had their hands on print in the first round was consistent and that this was a homogenous cohort. This has implications for the teacher’s impact on the participants as majority of the students had their hands on print.

Round Two Grade 3 Results

Table 6: Number of participants with Hands on Print in second ten minute interval

	Sample Size	Mean	Standard Deviation
School A	36	33	4
School B	30	29	1.6

Table 6 shows that in the second round of the 10 minute observation, School A had a mean number of 33 participants whose hands were on print. This number is much higher than the mean number of 0.2 in the first round (as shown in Table 5). It is evident that the lesson instructions resulted in most of the learners in the observed classroom engaging with print or being ready to engage with print. While the mean for school A in the second round is a good result, one may argue that the engagement with print was too delayed thus limiting the amount of time (in the lesson) spent engaged in literacy events. The standard deviation for school A is four (4). This result shows that the cohort was homogenous in this round and that most participants had their hands on print during the second 10 minute observation.

In addition, Table 6 shows that school B had a mean number of 29 and a standard deviation of 1.6. School B's exposure to print was consistent in both rounds. This shows that the participants in school B had a higher opportunity to engage with text than school A. The participants had their books on their desks for a longer duration of the lesson. These numbers show that a large majority of the participants in both School A and B had their hands on print in the second round of the observation.

Round One Grade 4 Results

Table 7: Number of participants with Hands on Print in first ten minute interval

	Sample Size	Mean	Standard Deviation
School A	30	24	3
School B	30	24	6

Table 7 shows the mean and percentage of Grade 4 participants at school A and school B who had their hands on print during the first ten-minute interval observed. School A had a mean score of 24. 80 % of the participants had their hands on print. An indication that, should they be instructed to or should the need arise, majority of the participants would have been ready to read and engage with the print that they had their hands on. Similarly, school B had a mean number of 24. Although the standard deviation of the 2 schools differed, both schools were homogenous cohorts.

Round Two Grade 4 Results

Table 8: Number of participants with Hands on Print in second ten minute interval

	Sample Size	Mean	Standard Deviation
School A	30	25	4
School B	30	25	4

Table 8 above shows the mean number of participants who had their hands on print in the second round was an equal number of twenty five (25) in both school A and school B. Also shown in table 8 is that the standard deviation in School A and school B was four (4). The standard deviation for both schools indicates that the cohort was homogenous. Based on the numbers it is evident that the Grade 4 participants had access to print in close proximity which indicates that there was a high opportunity for the participants to engage with print and there was a high reading opportunity for a large majority of the participants in both schools.

4.2.3 Writing

Round One Grade 3 Results

Below are the results for the participants who were engaged in writing during the first and second round of observations.

Table 9: Number of participants writing in first ten minute interval

	Sample Size	Mean	Standard Deviation
School A	36	0.1	0.3
School B	30	11	12.5

Table 9 above shows the mean number of participants who were engaged in writing during the first round of the 10 minute interval observation. The mean number of participants who were writing in school A was 0.1 and the standard deviation was 0.3. School B on the other hand had a mean number of 11 participants who were writing and the standard deviation was 12.5.

The results for both schools indicate that in the first round, there was a small number of grade 3 participants who were writing in the first 10 minutes of the lesson. The numbers show that only a few participants were engaged in writing as a literacy event. The activity of writing was not done by all participants which has implications for the teachers impact in the classroom. Learners were instructed by teachers when to write, however, it is evident that the instruction

was not one followed by the participants. The teacher had limited impact on getting all the participants to write in their books.

Round Two Grade 3 Results

Table 10: Number of participants writing in second ten minute interval

	Sample Size	Mean	Standard Deviation
School A	36	12	14
School B	30	10	12.5

Table 10 shows the number of Grade 3 participants who were writing during the second ten-minute interval of lesson observations. School A had a mean number of 12 participants writing and a standard deviation of 14. The mean number for school A was much higher in the second round than the first round of the observation. More participants were engaged in writing in the second round; however, the number was less than 50% of the total number of participants in that class. This shows that over half of the participants in that lesson did not engage in writing as a literacy event which plays a part in the reading development of learners. The standard deviation in both the second and first round of observations was higher than the mean number which further indicates that the cohort of participants was not a homogenous group and writing as an activity was not done by all the participants at any stage during the observations.

School B had a mean number of 10 participants who were writing and a standard deviation of 12.5. The number of participants writing during both the first and the second round of the observation shows that (as with school A) less than 50 % of the participants were engaged in writing as a literacy event. The standard deviation for both rounds was higher than the mean which shows that the cohort of participants observed was not homogenous. It is evident that in both schools the teachers impact on the participants was low as less than half the participants in both lessons were engaged in writing activities and the participants were not doing the same things as a class which was led and instructed by one teacher. There was a lack of uniformity in both the grade 3 classes that were observed.

Round One Grade 4 Results

Table 11: Number of participants writing in the first ten minute interval

	Sample Size	Mean	Standard Deviation
School A	30	18	10
School B	30	13	12

Table 11 shows the mean number of grade 4 participants from school A and school B who were engaged in writing in the first 10 minute interval of the classroom observation. The table also shows the standard deviation for each school. School A had a mean number of 18 participants who were engaged in writing as a literacy event and a standard deviation of 10. School B on the other had a lower mean number of 13 participants who were engaged in writing and a standard deviation of 12.

In the first round of the observation it is evident that not all participants were engaged in writing as a literacy event. It is evident that some participants in the classroom did not take part in this literacy event and it is a substantial number of participants who (at some stage or other within the first ten minutes) did not write. As with the grade 3 results, the uniformity and teacher impact are low as a significant number of participants did not take part in writing as part of the activities done during the lesson. Writing was one of the class activities; however, not enough participants took part in this activity which is an indication that some participants were excluded from this literacy event although all the reasons for this are not clear. A concern across both grades is that a significant number of participants were not included and engaged in writing as a literacy event.

Round Two Grade 4 Results

Table 12: Number of participants writing in the second ten minute interval

	Sample Size	Mean	Standard Deviation
School A	30	7	9
School B	30	11	14

Table 12 above shows the mean number of participants engaged in writing as a literacy event in the second round of the observations at School A and B which both had a sample size of 30 participants. School A had a mean number of 7 and a standard deviation of 9. School B on the other hand had a mean number of 11 and a standard deviation of 14. This table shows that the number of participants who engaged in writing at both schools was low in the second round of the 10 minute interval observation. It has been consistent that the mean number of participants engaged in writing was lower than 50%. These low numbers continue to indicate that the teacher impact at the schools was low during the observations and that a significant number of participants had a 0 to low frequency of number of times that they were engaged in writing. In addition there is no uniformity in how the participants engaged with writing as a literacy event as the mean numbers show low engagement from the participants.

4.2.4 Comparison of literacy events in Grade 3 and 4

Below is a comparison of the literacy events in Grade 3 and 4. This section compared and contrasted the findings across the two schools and grades in terms of the frequency of eyes on print, frequency of hands on print and lastly, the frequency of writing in Grade 3 and 4.

Frequency of eyes on print

The graph below is a visual representation of the frequency of the grade 3 and 4 participants eyes on print.

figure 1 showing frequency of eyes on print Grade 3 & 4

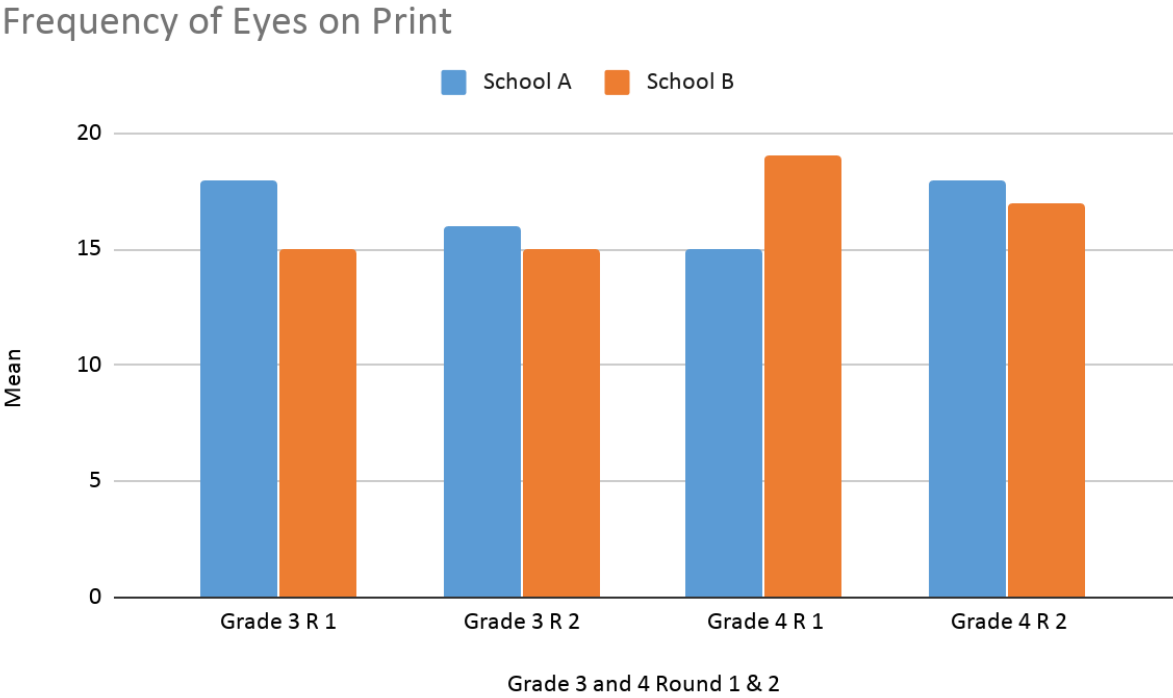


Figure 1 is a visual representation of the mean number of participants who had their eyes on print. Represented on figure 1 is the mean number of grade 3 participants who had the eyes on print in both round 1 and round 2 of the observation as well as the mean number of grade 4 participants who had their eyes on print in round 1 and round 2 of the 10 minute observations.

Grade 3 of school A shows a higher number of participants who had their eyes on print in the first round of the grade 3 observations, however, in the second round there was an equal mean number for both schools. It is evident that the frequency of eyes on print in both grade 3 classes was similar - as the difference between the results in the first round was a small number.

In addition, figure 1 shows that the grade 4 participants had a higher frequency eyes on print than the lower (grade 3) participants. This shows that in grade 4, the participants had a greater engagement with text than the grade 3 participants in terms of the number of times that the participants had their eyes on print. This result shows that there is a transition from

one level (grade 3) to the next (grade 4) where participants in a higher grade are more engaged in a literacy event to their development being on a higher level.

Hands on print

Figure 2 is a graph showing hands on print grade 3 & 4

Frequency of Hands on Print

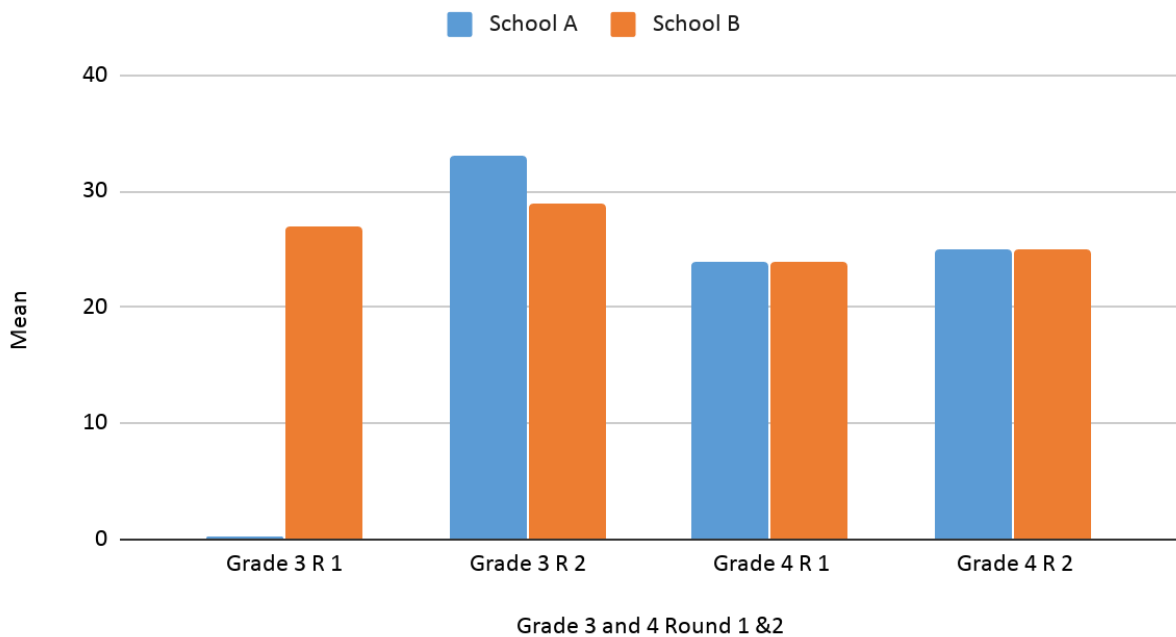


Figure 2 above shows a visual representation which compares the results for hands on print between the grade 3 school A and school B as well as the results from school A and school B grade 4. In round one, school A grade 3 had a notably lower mean, whereas the result was much higher in the second round for the same school. This shows that the level of engagement increased as the lesson progressed. School B grade 3 had a similar result in that the participants engagement with hands on print improved in the second round of the observation. It is evident that both schools' engagement with print increased as the lesson progressed as seen in the increased mean during the second round (R 2). Therefore more participants spent limited time with their hands on print and had short classroom engagement with print.

As observed with the grade 3 classes, the mean number of grade 4 participants who had their hands on print increased in the second round of the observations. However, the increase was not as substantial as with the grade 3 participants from school A for example. The grade 4 results presented in this graph show more consistency and uniformity than those of the grade 3 classes. From the beginning of the observation, over 50 % of the participants in both classes had their hands on print. On the other hand, the graph shows that more grade 3 participants had their hands on print than the grade 4 participants. This is a concerning find as it has implications for how learners transition from one grade to the next. One would expect a higher number of participants in grade 4 to have their hands on print as grade 4 is a higher grade that should have a higher engagement with literacy events than grade 3.

Writing

Figure 3 is a graph showing the frequency of writing in grade 3 & 4

Frequency of Writing

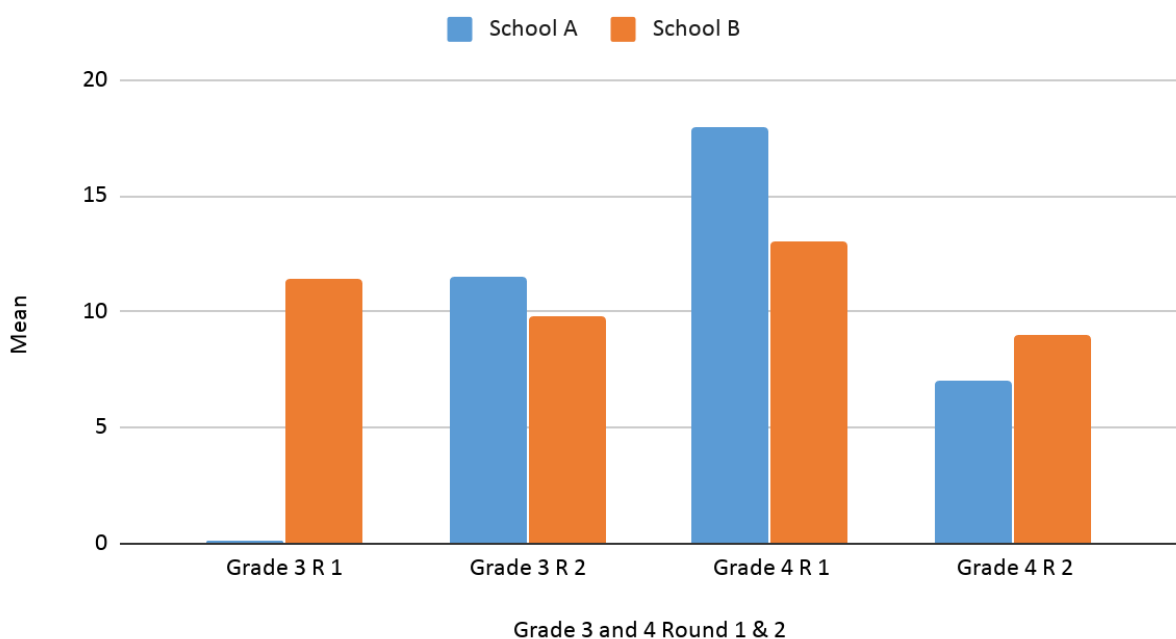


Figure 3 is a visual representation of the frequency of writing that was observed in grade 3 and 4 classrooms in both round one (R 1) and round (R 2) of the ten minute observations. The graph shows that in the first round, there were more grade 4 participants engaged in writing than grade 3 participants. It was revealed in this graph that a higher mean of grade 4

participants began writing from the beginning of the lesson, whereas a lower mean number of grade 3 participants were engaged in writing from the beginning of the lesson. Grade 3 School A had a significantly low mean number of participants engaged in writing with a mean of less than 1. The same class had a low mean number of participants who had their hands on print at the beginning of the lesson which shows that this particular class had limited engagement with literacy events during the first round of the observation.

In addition, the graph shows that in the second round of the ten minute observations, there was a higher mean number of grade 3 participants writing than grade 4 participants. This is a change from the first round where more grade 4 participants were engaged in writing. Furthermore, it is shown in figure 3 that the mean number of grade 4 participants engaged in writing dropped from the first round. Of concern is that figure 3 shows how low the frequency of participants engaged in writing was for both grades (especially in R 2) because less than 50% of the participants were engaged in writing. This raises questions around why there was such a small number of participants involved in writing and what the role of the teacher was in ensuring that more participants were able to write.

This section of the report discussed the observed literacy events in the grade 3 and grade 4 classes. The results show that that, while participants were engaged in literacy events, there were a number of learners that were not engaged in the literacy events and in some cases the engagement only took place in the second round of observations for some participants. Due to the mean numbers of the participants engaged in the literacy events being low, it was revealed that teacher impact in these classrooms was low.

4.2.5 Active Teaching Rubric

During the classroom observations, the teachers were observed and assessed according to the 'Active Teaching Rubric'. The variables that the rubric focused on are discussed below as well as the findings thereof.

Table 13: Active teaching Rubric scores

	Sample Size	Minimum	Maximum	Mean	Standard Deviation
Goal Oriented Teaching	4	0	4	3.5	0.6
Tasks Challenging	4	0	4	3.3	0.5
Positive Climate	4	0	4	3	0.8

Table 13 shows the scores that the teachers got from the Active Teaching Rubric. A total of four teachers were observed. The minimum score attainable was 0 and the maximum score was 4 across 3 variables, namely; Goal Oriented Teaching, Tasks Challenging, and Positive Climate. The mean for goal oriented teaching was 3.5 and the standard deviation was 0.6. Secondly, the mean score for tasks challenging was 3.3 and the standard deviation was 0.5. Lastly, the mean for positive climate was 3 and the standard deviation was 0.8. The group of teachers observed was homogenous as seen in the low standard deviation attained across all variables. The teaching styles observed were similar.

Goal Oriented Teaching

In the language lessons observed it was evident that the teaching was goal oriented. The topic for each of the lessons were written on the board by each teacher and they communicated what the participants would be learning during those lessons. One of the lessons was on sentence construction. The lesson was taught in isiZulu and the participants were taught by the teacher, how to construct sentences in isiZulu. The teacher gave the participants an opportunity to raise their hands and say what their sentences were aloud and the teacher made corrections were necessary and wrote the corrected sentences on the board. This activity allowed students to not only create sentences in their home language but also to see what the correct spelling and construction of the sentences was meant to be. The participants made the corrections and learned spelling and sentence construction in isiZulu. This type of activity improves the participants reading and writing skills.

During the second lesson that was observed the focus was on a story read in the previous lesson. Participants were asked to retell the isiZulu story in the correct sequence. The activity was done orally. The participants had to raise their hands and tell the teacher what the plot of the story was. While the focus was on retelling the story orally as well as identifying pictures that correspond with the event in the story, not all learners understood this task. When the teacher instructed the participants to work independently, two participants had not understood the instructions because isiZulu was not their home language. It took the teacher over twenty minutes to include these students in the lesson. Translingual instructions would have prevented two participants from being excluded in the lesson as the teacher would have used English to help the participants understand what they were supposed to be doing. Arguably, those participants would also have been able to engage in the class discussion. The goal was clear- to get the participants to retell the events of the story read in the previous lesson and link their sentences to corresponding pictures in isiZulu- however, for some participants to complete this task, they needed instructions in English. It is important for the teaching to be goal oriented and it is equally important that the teaching is inclusive. The goal of inclusion was only met when the teacher finally noticed that two participants were sitting quietly not because they were well-behaved and attentive but because they did not understand what was being taught thus denied epistemic access for the first twenty minutes of the lesson.

Tasks Challenging

Both observed lessons were challenging for the participants. Two learners were overwhelmed during the second class that was observed because they did not understand the instructions. However, after the task was explained in English, the challenge was made better for the participants as they then knew what was expected of them and they could complete the task with the help of the teacher.

Positive Climate

During the lesson observations, one of the classes had a positive environment. The participants were free to give share the sentences they constructed in isiZulu and when

corrected they wrote down the correct answers and continued to share their responses and showed that they were comfortable and appreciated correction from the teacher.

On the other hand, the second lesson observed did not have a positive climate for all participants. One of the participants did not follow the instructions given by the teacher and wrote their sentence under the wrong picture and the teacher pinched him for making this mistake. While the teacher's reaction did not surprise the participant and his class, the participant remained quiet for the rest of the lesson and looked embarrassed. Such a response from the teacher makes it difficult for learners to engage in the lesson and it makes learning (in whatever language) more challenging and unpleasant.

Based on the observations of teachers' translangual classroom practices, it is evident that translanguaging is used in the lessons. Translanguaging is effective in getting learners to participate during classroom discussions as the learners are allowed to use their home languages or languages they are proficient in (as with the two foreign students).

Figure 4 Mean and standard deviation across Active Teaching Rubric variables

Mean and Standard Deviation

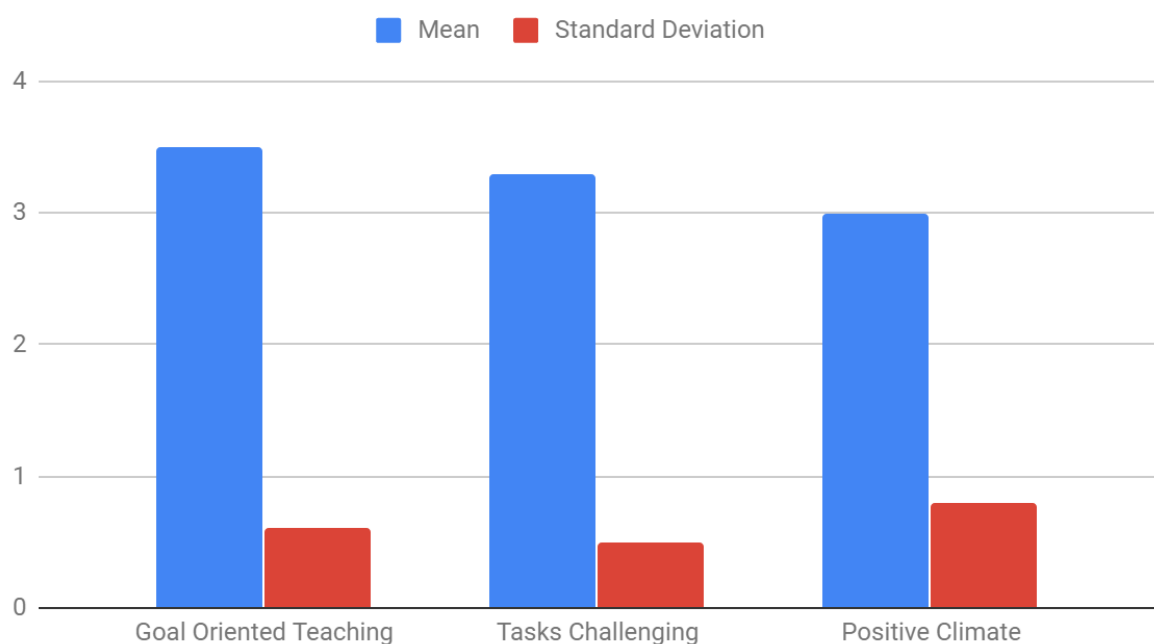


Figure 4 is a visual representation of how the researcher scored Grade 3 and 4 teachers during lesson observations. The means scored by the teachers were high and the standard deviation was lower than the mean scores showing that the cohort of teachers observed was homogenous.

4.2.6 PRINT ENVIRONMENT

Grade 3 classroom results are presented in Figures 5 and 6 while Grade 4 classes are presented in Figure 7 and 8, respectively.

Grade 3 Print Environment

Grade 3 print environment shows two trends. First, it is a moderately rich environment and the second is poor print environment.

Figure 5 Print environment in Grade 3 Classroom



Figure 5 shows the print environment of a Grade 3 classroom. This classroom was an example of a poor print environment. Seen in the figure are letters of the alphabet written in different colours on A4 paper. Under each letter was one word in English that starts with the letter represented and an image of the word represented. The letters 'a' and 'h' of the alphabet were missing. The spaces on the wall suggest that the letters were there at a different stage but may have fallen off the wall, however, they were not replaced.

The print on the wall in this classroom is a combination of texts that were composed by the teachers (local texts) and texts that were not composed by the teachers or students (imported

texts). The origin of the text has implications for the amount of agency the teacher and learners have in relation to creating their own texts that they can learn from. Below the letters of the alphabet were a group of posters that are examples of imported texts. The print in this classroom shows that the literacy events in the classroom environment were monolingual as the print was all texts were written in English. The writing on the print was limited in that the focus was on single words isolated from the context of sentences or paragraphs. The print was relatively accessible as the letters were not too high up on the classroom walls and the font size is visible from all sides of the classroom. However, the words and images below the letters were accessible to learners whose desks were the closest to the wall. In addition to the letters were imported texts. Below the letters are posters that talk about different values. While the text is extended (includes sentences and short paragraphs) the reading was not on the level that the Grade 3 learners were on. Although there was a relatively good quantity of text materials in this classroom, there was very little intentional focus on meaning making and relevance to academic age of the participants.

Figure 6 Print Environment in Grade 3 classroom



Figure 6 shows the print environment of a Grade 3 classroom. This classroom was moderately print rich with texts on the wall and on the chalkboard (which are a combination of the teacher's writing and imported texts). The texts were a combination of locally produced texts that were composed by the teacher and imported texts that are not composed by the teacher or the learners. Above the board were letters of the alphabet written in both lower and upper case. Below the letters were numbers with images that represent the number on the page. The texts on this classroom wall were mainly vocabulary that the learners were expected to know. The texts were multilingual in nature which shows that the learners were exposed to

texts written in more than one language. In addition, on the board are the sentences written by the teacher to model what participants had to write in their books. The sentences are written in isiZulu. The print above the board is not easily accessible. The texts with the numbers and images were printed with a small font that was not easy to read, learners would not be able to take the texts down to read them and use the information represented on the texts.

Grade 4 Print Environment

Figure 7 Print environment Grade 4 classroom



Figure 7 shows a Grade 4 classroom. This classroom shows a moderately rich print environment with texts all over the walls. The majority of the texts were about vocabulary related to body parts, members of the family and Mathematics terminology. They seem to be largely local texts composed by the teacher. Another observation was that the texts were not extended to produce meaningful chunks such as sentences, however, the texts were in favour of one word at a time, disjointed from other words in proximity. This shows that the classroom environment was externally focused and did not leverage on literacy production opportunities by the learners - something in contradiction to current philosophy of education

on learner-centred approach. As the classroom stands, it took away the agency of the learners and did very little to promote incidental reading from self-produced reading materials. Familiarity and locality (concreteness) are foundations for reading development in the early years, but these pillars of early literacy seem undergird by more powerful and externally oriented text types. The texts on the walls in the classroom were in English and isiZulu. The two languages were separated in that, the one side of the classroom had vocabulary in English and the other sides had texts written in isiZulu. There is an opportunity to put some words together and have the isiZulu word and English word for the same object. This juxtaposition improves the multilingual incidental reading.

Figure 8 Grade 4 print-poor classroom

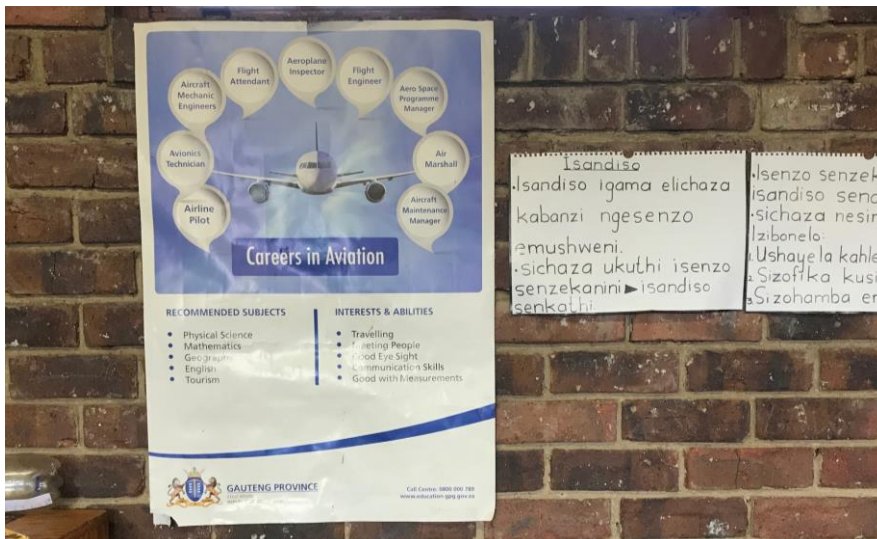


Figure 9 Grade 4 print-poor classroom



Figure 8 and 9 show the print-poor environment with a few texts that were placed randomly around the classroom. The texts were about different topics; life skills and parts of speech in isiZulu. They were largely imported texts with only one text composed by the teacher. The classroom environment is externally focused and does not leverage on literacy production opportunities by the learners- which contradicted the current philosophy of education on learner-centred approach. As with the grade 3 classrooms observed, the agency of the learners was taken away and very little was done to promote incidental reading from both self-produced reading materials and imported materials as there was a paucity of texts for learners to read. The print in the classroom is a poor representation of the learning that takes place in the classrooms as learners' work and teachers notes on topics learned were not displayed on the wall.

The print environment of a classroom is a precursor for reading development as a print-rich classroom means that there are more opportunities for incidental reading to take place for each learner. The subconscious reading that takes place as a result of the incidental reading is vital in the development of learners' reading skills. A print poor environment (like those shown in the schools observed) shows weak spaces for enabling incidental reading.

4.3 Teachers' Metacognitive Reflections

Below are the results from the teachers' questionnaire which reveal their thinking and perspectives on their teaching and the learners' literacy.

4.3.1 Teaching Reading

Teachers were asked to rate themselves on a scale of 1 to 4 indicating whether they taught their learners how to read with one being 'strongly disagree' and 4 being 'strongly agree'. The continuum is used to indicate the degree at which teachers taught their learners how to read.

Table 14 showing teachers' ratings for teaching reading

Variable	Sample Size	Minimum score	Maximum score	Mean	Standard Deviation	Percentage
Teaching Reading	4	1	4	3.7	0.5	93.7

Table 14 shows the results from the participants' responses regarding the degree to which they taught reading. A total of 4 teachers completed the questionnaire. The minimum score for the rating was 1 and the maximum score was 4. The table shows that the mean score was 3.7 and the standard deviation was 0.5, in addition, the overall percentage was 93.7 %. These scores are an indication of the teachers' confidence in their teaching reading. They have indicated that they taught their learners how to read and gave themselves a high rating. It is evident from the teachers' responses that the participants in the study are taught how to read and that reading has been part of the literacy events in classrooms in addition to what was observed in the study.

4.3.2 Reading Difficulties

The participants were asked to give a rating of their between 1 and 4 which would show their perspectives on the reading difficulties that their learners were having. A rating of 1 is an indication that the participants strongly disagreed that their learners were experiencing any reading difficulties while a rating of 4 indicates that the teachers strongly agreed that their learners were experiencing reading difficulties.

Table 15 showing teachers' ratings for reading difficulties

Variable	Sample Size	Minimum score	Maximum score	Mean	Standard Deviation	Percentage
Reading Difficulties	4	1	4	3	0.8	75

Table 15 shows that the sample size was 4 participants who could score a minimum of 1 and a maximum of 4 to indicate the level of reading difficulties experienced by their learners. The mean score was 3 and the standard deviation was 0.8. Lastly, the percentage scored was 75 %. These results indicated firstly that the participants were of the view that their learners had reading difficulties. The standard deviation was an indication that the participants were a homogenous cohort as the standard deviation was much lower than the mean. It is evident that the participants were in agreement that their learners had reading difficulties. These results may be used as a precursor for what the participants' results in their literacy assessments.

In the previous question, participants had to state the degree to which they taught their learners how to read. Their results were a high 93.7 %; however, the rating for learners' reading difficulties was also high. This shows that despite teachers teaching learners how to read, learners still presented reading difficulties which had a negative impact on the learners' literacy development. These results highlight a need for strategies to assist learners with reading difficulties as the rate of the reading difficulties, according to the participants, was high.

4.3.3 Linguistic Comprehension: English

The participants were asked to rate their learners' linguistic comprehension in English on a scale of 1 to 4 with 1 indicating that their linguistic comprehension is low and 4 indicating that it is high or good.

Table 16 showing teachers' ratings for learners' linguistic comprehension: English

Variable	Sample Size	Minimum score	Maximum score	Mean	Standard Deviation	Percentage
Linguistic Comprehension: English	4	1	4	3	0.8	75

Table 16 shows the results for the teachers' perspective on their learners' English linguistic comprehension. The sample size was 4 teachers and the minimum score was 1 while the maximum score was 4. The standard deviation was 0.8 which shows that the results given by the participants were similar, therefore the learners in this study were viewed as proficient speakers of English as the percentage was 75 %.

The learners' linguistic comprehension positively affects the learners' reading comprehension. The teachers' perspectives so far in the study show that the participants viewed their learners to be strong speakers of English. Linguistic comprehension is one variable in the formula for reading comprehension. The next thing that learners would need to have is the ability to decode and that would mean that the learners should be able to read for meaning.

4.3.4 Reading in English

Participants were asked to rate their learners' ability to read in English on a scale of 1 to 4, where 1 indicates that they are not good at it and 4 being a good ability to read in English.

Table 17 showing teachers' ratings for learners' reading ability: English

Variable	Sample Size	Minimum score	Maximum score	Mean	Standard Deviation	Percentage
Reading ability: English	4	1	4	3	0.8	75

Table 17 shows the participants' views on their learners' English reading ability. The sample size of 4 teachers is shown on the table. The minimum score was 1 and the maximum score was 4. The mean was 3 while the standard deviation was 0.8 which shows that the cohort of participants was homogenous and their perspectives of their learners' reading ability was similar across classrooms. The reading ability score was high however a slight contradiction is presented in that the participants stated that their learners had presented reading difficulties. The participants showed confidence in their learners' English reading ability.

4.3.5 Writing: English

Participants were required to rate their learners' ability to write in English on a scale of 1 to 4, where 1 indicates that they are not good at it and 4 being a good ability to write in English.

Table 18 showing teachers' ratings for learners' writing: English

Variable	Sample Size	Minimum score	Maximum score	Mean	Standard Deviation	Percentage
Writing: English	4	1	4	2.7	0.9	68.7

Table 18 shows the participants' views on their learners' ability to write in English. The table above shows that the sample size was 4 and the minimum score was 1 and the maximum score was 4. The mean rating scored by the participants was 2.7 which was the lowest mean so far in the questionnaire. The standard deviation was 0.9 which shows that the participants' ratings were similar but more spread out than in the other variables. In addition, the table shows that the percentage for the ratings was 68.7 %. Of all the literacy events that take place in the classroom, writing, according to the teachers, has the lowest score. This shows that more learners had writing difficulties than reading difficulties as observed by their teachers.

4.3.6 Linguistic Comprehension IsiZulu

The participants were asked to rate their learners' linguistic comprehension in isiZulu on a scale of 1 to 4 with 1 indicating that their linguistic comprehension is low and 4 indicating that it is high or good.

Table 19 showing teachers' ratings for learners' linguistic comprehension: isiZulu

Variable	Sample Size	Minimum score	Maximum score	Mean	Standard Deviation	Percentage
Linguistic Comprehension: isiZulu	4	1	4	3.5	0.5	87.5

Table 19 shows the participants' views on their learners' linguistic comprehension in isiZulu. The sample size of participants was 4. The minimum score was 1 and the maximum score was 4. In addition, the mean score was 3.5 with a standard deviation of 0.5. The mean score and standard deviation show that the participants were a homogenous cohort in that their ratings were similar as seen with a standard deviation that is lower than the mean. The percentage of 87.5 shows that there is a high level of confidence in the learners' isiZulu linguistic comprehension. The high percentage was as a result of isiZulu being the home language of the learners.

4.3.7 Reading in isiZulu

Participants were asked to rate their learners' ability to read in isiZulu on a scale of 1 to 4, where 1 indicates that they are not good at it and 4 being a good ability to read in isiZulu.

Table 20 showing teachers' ratings for learners' reading ability: isiZulu

Variable	Sample Size	Minimum score	Maximum score	Mean	Standard Deviation	Percentage
Reading ability: English	4	1	4	3	0.8	75

Table 20 shows the participants' views on their learners' isiZulu reading ability. The sample size of 4 teachers is shown on the table. The minimum score was 1 and the maximum score was 4. The mean was 3 while the standard deviation was 0.8 which shows that the cohort of participants was homogenous and their perspectives on their learners' reading ability was similar across classrooms and schools. Noteworthy is that according to the participants their learners' ability to read in English and isiZulu was the same even though their learners' linguistic comprehension was higher in isiZulu.

4.3.8 Writing: isiZulu

Participants were required to rate their learners' ability to write in isiZulu on a scale of 1 to 4, where 1 indicates that they are not good at it and 4 being a good ability to write in isiZulu.

Table 21 showing teachers' ratings for learners' writing: isiZulu

Variable	Sample Size	Minimum score	Maximum score	Mean	Standard Deviation	Percentage
Writing: isiZulu	4	1	4	2.7	0.9	68.7

Table 21 shows the participants' views on their learners' ability to write in isiZulu. The table above shows that the sample size was 4 and the minimum score was 1 and the maximum score was 4. The mean score was 2.7 which shows that the participants did not all give their learners a high rating for their ability to write in isiZulu. The standard deviation of 0.9, although lower than the mean shows that the ratings from the participants varied to a certain extent and that not all were of the view that their learners' ability to write in isiZulu was strong.

4.3.9 Reading Comprehension

Participants were required to rate their learners' overall reading comprehension on a scale of 1 to 4, where 1 indicates that they are not good at it and 4 being good reading comprehension.

Table 22 showing teachers' ratings for learners' reading comprehension

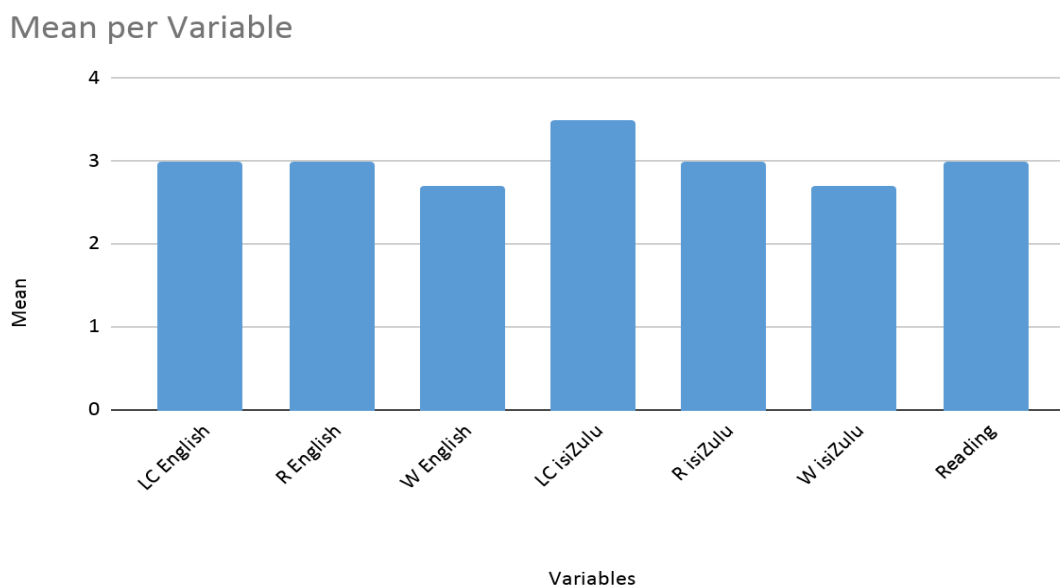
Variable	Sample Size	Minimum score	Maximum score	Mean	Standard Deviation	Percentage
Reading Comprehension	4	1	4	3	0.8	75

Table 22 shows the participants' views on their learners' reading comprehension. The table above shows that the sample size was 4 and the minimum score was 1 and the maximum score was 4. The mean score was 3 and the standard deviation was 0.8 which shows that the participants were confident in their learners reading comprehension. The percentage of 75 shown on the table is further evidence of the confidence the participants had on their learners' reading comprehension.

4.3.10 Comparison of Variables

The variables from the questionnaire are compared below and the teachers' ratings are analysed.

Figure 10 showing the mean per variable



On the questionnaires, all teachers strongly agreed that they taught reading and that reading was something that their learners were interested in. The findings of the study reveal that the teachers' reflections and the learners' results did not correspond.

Furthermore, the teachers stated that their learners were strong speakers, readers and writers of both isiZulu and English. However, the classroom observations did not reflect the statement made by the teachers. Instead participants were indeed battling to read and write in both languages. Rather, most participants were strong in speaking isiZulu but were not strong in reading and writing in the language as they needed the teachers help with sentence construction and there were learners who did not participate in one of the lessons because they had a limited understanding of isiZulu. It is important for teachers to have a better understanding of their learners' needs if they are to help them improve in and truly be strong in both their home language and English. Noteworthy is that only one teacher stated in their questionnaire that their learners did not have appropriate comprehension levels of the texts given to them. Only one in four teachers had a response that correlated with the findings from the assessments written by learners. The teacher reflected in Extract 1,

half of the learners have a serious problem in reading and writing in both isiZulu and English, then the other half of them are trying their best level and they are getting there.

This teacher was aware of their learners' ability as well as the effort that was made by some of the learners. It is a good start for teachers to fully understand the literacy levels that their learners were on so that they could plan lessons accordingly to ensure that learning took place and that learners were provided with the support that they needed to truly be strong speakers, readers and writers in both their home language and first additional language.

The same teacher quoted above described how the language lab in his classroom works. This is a strategy that the teacher uses to develop learners' literacy and create an appreciation for reading as in Extract 2 below:

...I divide my learners into four groups. The first group do sound as a bingo game, this is where they learn sounds. The second station is reading station where they pick a book of their choice and read it. The third station is listening and speaking station where I read a story for them and we talk about the story. The last station is creative writing where they write a story of their own choice then we share their stories with the class.

The teacher found this strategy to be an effective way to improve learners' literacy. Making the language lab multilingual was an inclusive strategy and helped learners to develop their language skills and use more than one language to tell their creative stories. The reasons stated above prompted the teacher use the language lab in their lessons.

The teachers that were observed and completed the questionnaire showed understanding of the importance of their learners being able to speak, read and write in more than one language as they are multilingual as they stated that they strongly agreed with this on the teacher questionnaire. However, majority of the participating teachers did not show an awareness of the learners' literacy skills as the participants results and the teachers' responses did not relate. The next part of the report reveals the participants results in the assessments that they participated in.

4.4 Grade 3 and 4 learners' literal and inferential comprehension gains in the post intervention phase

4.4.1 Grade 3 Word Recognition in English and Home Language

Word recognition is the participant's ability to recognise the words presented to them. Participants were shown five words in isiZulu which is their Home Language (HL) and five words in English which is their First Additional Language (FAL). The words shown to the

participants were monosyllabic words which were chosen purposefully as words that the participants would have been recognised based on their activities in their classroom. The words presented to the participants were chosen on the premise that the participants would have seen the words prior to the study. The words the participants had to recognise in isiZulu were, 'yebo' (yes), 'hleka' (laugh), 'imoto' (car), 'ubaba' (father) and 'inkomo' (cow). In English, participants had to recognise the words, 'boy', 'father', 'train', 'drink' and 'sleep'.

The study had a sample size of six Grade 3 participants consisting of three participants from each school. Below is a table that shows that the six participants had to recognise words in English and isiZulu. The minimum score that the participants could attain was zero, which was the case for the participants who were unable to recognise any of the words presented to them. The participants got one point for each word they were able to recognise in both isiZulu and English thus the maximum score that the participants could score for each language was five.

Table 23 Word Recognition in English and Learners' Home Languages Grade 3 pre-test

	Sample size	Minimum	maximum	Mean	Standard Deviation
Word recognition Home Language (isiZulu)	6	0	5	2	0.81
Word Recognition English	6	0	5	3.83	1.47

Table 23 above shows that six participants completed the assessment in both isiZulu and English. The minimum score that each participant could achieve was 0 and the maximum score that the participants could achieve was 5. The participants had a mean score of 2 in

isiZulu which is their first additional language and a total mean score of 3.83. It is surprising that participants would score lower in their home language than in their first additional language which they did not have as much exposure to.

The isiZulu results were below the international reading benchmark of 75% as the participants mean score is at a very low 40%. On the other hand, the English result is higher than the international benchmark which as it is at 76.6%. While the result is impressive, what is of concern is that the participants had clearly not transferred their English literacy skills to their home language. 4 of the 5 English words were monosyllabic, this is arguably one of the reasons why decoding the words may have been less challenging for participants whereas the isiZulu words may have been more challenging to decode for the participants. This, however, does not take away from the fact that participants were expected to perform better in their home language.

The pre-test results reveal that more needs to be done to develop the participants' ability to recognise words in isiZulu. This result was not consistent with the teachers' reflection, which stated that the participants were strong readers of isiZulu. The discrepancy between what the teachers claim to be the reality of the participants' abilities and the results from the study are concerning as this suggests that the teachers themselves did not know how to better the performance of their learners.

Subsequent to the pre-test being completed, translingual treatment in the form of a conference and teacher training was conducted.

After a tailor-made training on translanguaging and advised to use translanguaging as a strategy to improve their learners' reading, writing and speaking of both their home language (isiZulu) and their first additional language (English), the participants were given a post-test measure after to assess the effectiveness of the translanguaging approaches shared with the teachers. The results for the post-test are in Table 24 below:

Table 24 Grade 3 Post-test Word Recognition in English and isiZulu

	Sample size	Minimum	maximum	Mean	Standard Deviation
Word recognition English	6	0	5	3.5	2.3
Word Recognition Home language (isiZulu)	6	0	5	3.3	2.5

Table 24 shows the mean number scored by participants for word recognition in English and isiZulu. The mean scored by the participants for word recognition in English is 3.5. This mean is 70% which is below the international reading benchmark of 75%. The standard deviation is 2.3. The results for English show that this group of participants is heterogenous showing that the participants' individual performance was scattered.

On the other hand, the table shows the results obtained by the participants for word recognition in isiZulu which are slightly lower than those obtained in the English word recognition assessment. The mean obtained by the participants was 3.3 which is lower than English by 0.2 points. A lower mean in the participants' home language is problematic because the participants interact more with the language, however, it appears that literacy in the participants' home language is underdeveloped. In addition to the English results being lower than those of English, the standard deviation is 2.5 meaning that this group of participants is heterogeneous. In one of the schools only one participant scored the maximum score of 5 while the others scored 0. The results of participant with the maximum score and those of the participants of the other school were able to positively skew the results thus not highlighting the fact that 2 of the 6 learners were unable to recognise 1 word in their home language.

Table 25 Comparison of pre and post-test Grade 3 word recognition: isiZulu

isiZulu	Mean	Standard Deviation
Pre-test	2	0.8
Post- test	3.3	2.3

Table 25 shows that in the pre-test, participants scored a mean of 2 for word recognition which was a low score, however, the participants results improved in the post test as the participants scored a mean of 3.3. The improvement of the results may be attributed to the more practice in reading and writing in isiZulu. It is imperative that the results continue to improve as the post test results are below the international benchmark. Word recognition in isiZulu continues to be an area that must be improved upon.

Table 26 the comparison between pre and post-test Grade 3 word recognition: English

English	Mean	Standard Deviation
Pre-test	3.8	1.4
Post- test	3.5	2.5

Table 26 shows that in the pre-test, participants scored a mean of 3.8 for word recognition in English which was above the international benchmark. Participants scored over the international benchmark in their first additional language. However, in the post-test, the results dropped by 0.8- making the result below the international benchmark in the post-test.

It is concerning that a language that learners had been interacting with from birth was yielding lower literacy results than a language that they only engaged with when they are at school and have spent less years speaking. The participants may have the linguistic comprehension, however, without the ability to decode the language, it is not possible for reading to take place. This is understood through the formula that states that reading is the product of

decoding and comprehension ($R = D \times C$) (Gough & Tunmer, 1986). The ability to recognise words in this study is equivalent to the participants' ability to decode the words presented to them.

The results presented have implications for the Grade 3 learners literal and inferential comprehension skills. This is because the inability to recognise words serves as a barrier for reading comprehension.

Figure 11 isiZulu and English word recognition mean pre- and post-test

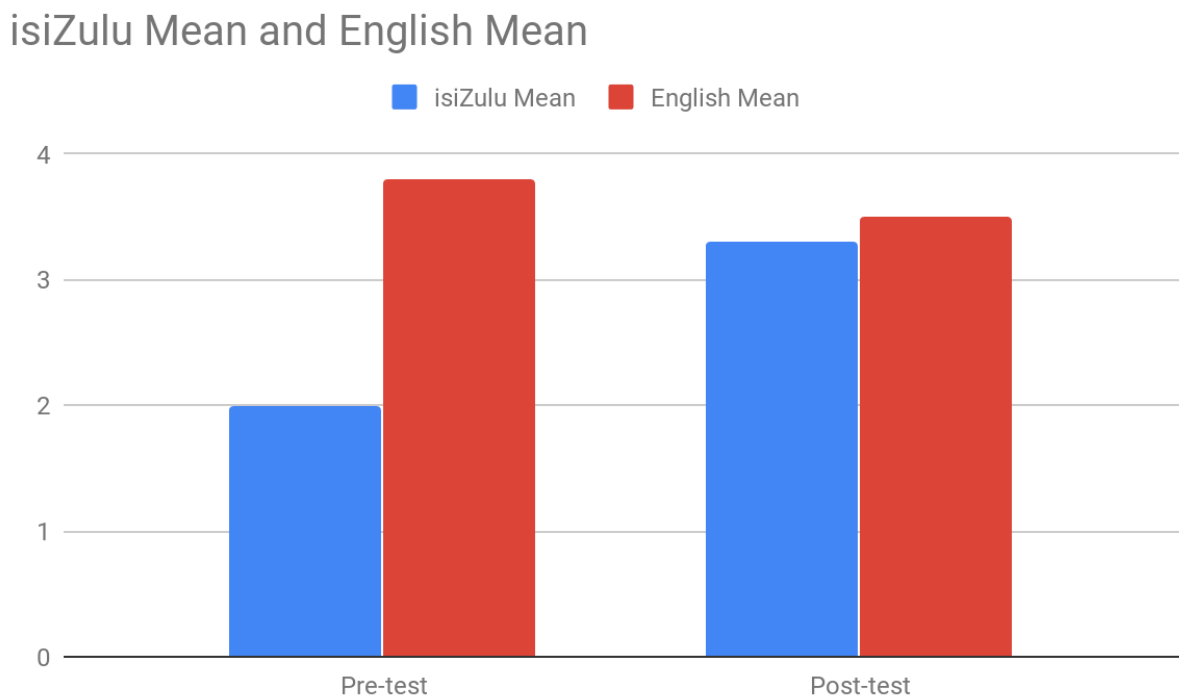


Figure 11 is a visual representation of Grade 3 participants' mean scores in word recognition for isiZulu and English pre- and post-test. The graph shows that participants mean score in isiZulu improved in the post-test while the English post-test result dropped. In addition, the participants scored a higher mean in isiZulu in the post-test than English in the post test.

4.4.2 Grade 3 Phonological Awareness

Phonological awareness is the participants' awareness of the sound of words or a group of letters in different languages. In this study the participants' phonological awareness was assessed in the participants' home language (isiZulu) and the English which is their first additional language (FAL). The participants were requested to make an epiphonological judgment on either rhyme or alliteration similarity. There were five items in total for each language. Each item had two pictures, one of the pictures was of the target and the other picture was the distractor. The participants were expected to choose a picture resembling the target sound in the context of one distractor.

In isiZulu, the participants were shown a duck and the word in isiZulu is 'idada'(duck), the word was 'isihlahla' (tree) and the distractor was 'umfula' (river). The second picture shown to the participants was 'umuntu' (person) and the target word was 'umlilo' (fire) with the distractor being 'inkomo' (cow). The next picture that was shown to the participants was 'ikhabishi' (cabbage), the target word was 'khala'(cry) and the distractor was 'idwala' (rock). The fourth word was 'bhola' (ball), the target word was 'ibhubhesi' (lion) and the distractor was 'indlu'. Lastly, the fifth word was 'inkomishi' (cup), the target word was 'inkosi' and the distractor was 'umtwana' (child).

The five items in English were, a baby, a rake, a bird, a tree and lastly, a frog. The target that went with the word 'baby' was 'ball' and the distractor was 'cat'. The target that went with 'rake', was 'cake' and the distractor was 'flower'. The third item, 'bird' was matched with the target 'bag' and the distractor was 'tree'. The next item was 'frog', which went with the target 'dog' and the distractor was 'rat'.

Table 27 phonological awareness in English and isiZulu pre-test

	Sample size	minimum	Maximum	Mean	Standard Deviation
Phonological Awareness isiZulu	6	0	5	2.6	1.9
Phonological Awareness English	6	0	5	4.3	0.8

Table 27 shows the results for Grade 3 phonological awareness in isiZulu and English. The mean score for phonological awareness in isiZulu was 2.6 and the standard deviation was 1.9. On the other hand, the results for English were higher with a mean score of 4.3 and a standard deviation of 0.8. The standard deviation for the isiZulu result shows that the participants were a heterogeneous cohort, however, the standard deviation for English shows that the participants were homogenous in their level of phonological awareness in English.

Table 28 showing phonological awareness in English and isiZulu post test

	Sample size	minimum	Maximum	Mean	Standard Deviation
Phonological Awareness isiZulu	6	0	5	3.8	1.4
Phonological Awareness English	6	0	5	4.6	0.8

Table 28 shows the results of the phonological awareness study. The sample size for each language was 6 Grade 3 learners. The minimum score that could be attained by each

participant was 0 and the maximum amount of points that could be scored was 5 points. The learners scored one point for each word that they got correct.

The mean for phonological awareness in isiZulu was 3.8 and the phonological awareness in English was 4.6 which is higher than that obtained by the participants in their home language. The isiZulu and English results were 76 and 92% respectively, and while these mean scores for are on par with the international benchmark, the issue is that the participants' performance in their home language was lower than that of their first additional language. Based on the classroom observations, the home language was used more frequently than their first additional language for both reading and speaking. However, the African languages and English differ significantly in terms of phonology and phonological awareness is in many respects at odds with the typology of African languages which are phonologically transparent and morphologically rich. The attention to phonological awareness, which is incongruent with the nature of African languages, may be the reason for a lower mean in the phonological awareness in isiZulu. Noteworthy, was that when the learners looked at the pictures in English they only associated one word with the pictures presented to them.

On the other hand, with most of the isiZulu words the participants came up with more than one word for the picture presented to them. The participants were aware of the different dialects of their home language. For example, a picture of a duck was called 'idada' (which was the target word) and some participants said the picture was of 'iduck' which the use of the English root word 'duck' and they add the isiZulu prefix 'i'. Other participants said 'Klabishi' instead of 'khabishi' for the image of a cabbage.

The standard deviation for both languages is lower than the mean for each language. This shows that the participants represent a homogenous cohort. The difference in the results highlights the differences between the subjects, as mentioned above, phonological awareness in an African language like isiZulu is at odds with the typology of the language. Therefore, the focus should be on how the languages are constructed.

Figure 12 Phonological Awareness pre- and post-test Grade 3 isiZulu and English

isiZulu Mean and English Mean

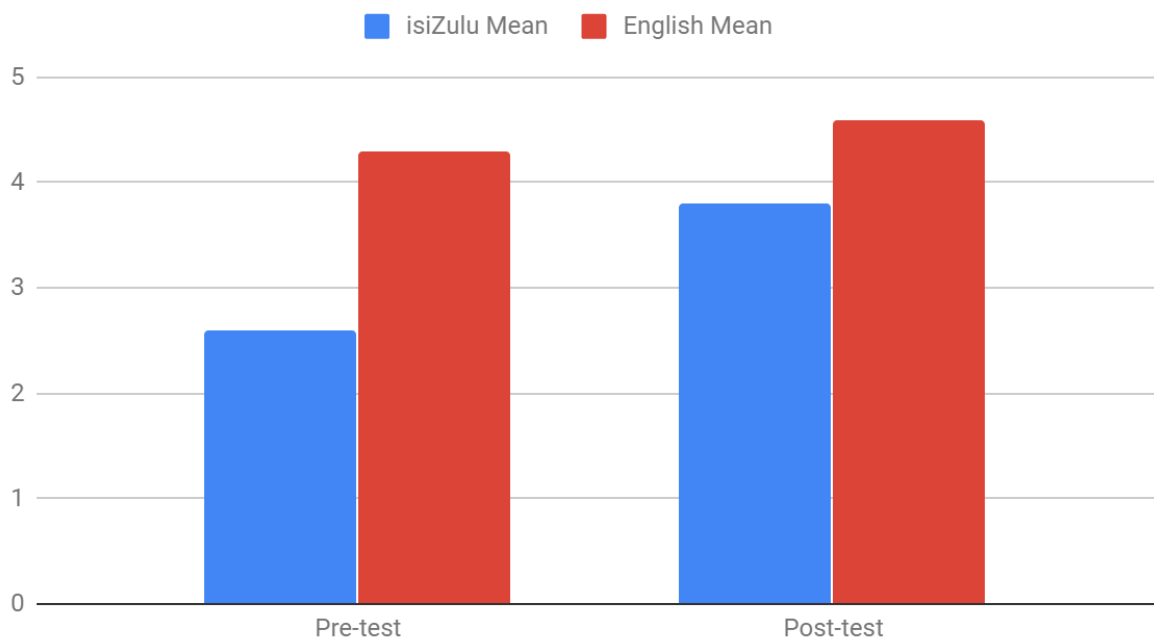


Figure 12 is a visual representation that compares the Grade 3 phonological awareness results for isiZulu and English, pre-and post-test. The graph shows that there was an improvement in the phonological awareness of participants in both English and isiZulu. Furthermore, the graph shows that the participants performed better in English in the pre-and post-tests.

Figure 13 English and isiZulu post-test word recognition and phonological awareness

IsiZulu and English

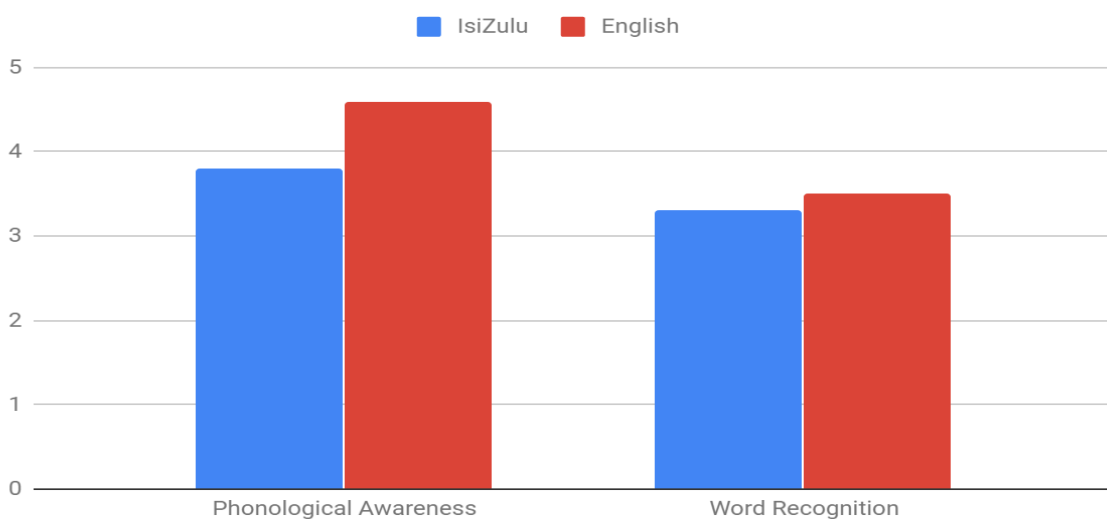


Figure 13 is a comparison of the post test results for word recognition and phonological awareness in isiZulu and English. Participants scored higher for phonological awareness than for word recognition. For both variables, participants scored higher for English in both word recognition and phonological awareness. These 2 variables are not an indication of participants' comprehension skills as the assessments were not focused on participants ability to make meaning. The two variables, however, are needed in order for participants to be able to transition from learning to read, to reading to learn.

4.4.3 Grade 4 literal Comprehension

The Grade 4 participants were required to write a reading comprehension assessment. Reading comprehension assessments measure the participants' understanding of the texts that they read. Literal questions require participants to recall the information from the text that they read. Participants are able to retrieve the answers to these questions directly from the text. Literal questions are lower order questions which do not require high cognitive engagement. Participants show their understanding of the vocabulary used in the text as well as the different events that take place in the text. The table below shows the results for the literal questions that the learners had to answer in both isiZulu and English.

Table 29 Grade 4 pre-test results in literal questions

	Sample size	minimum	Maximum	Mean	Standard Deviation
Literal Comprehension English	66	0	5	1.9	1.2
Literal Comprehension IsiZulu	66	0	5	1.8	1

Table 29 shows the sample size of the Grade 4 participants, which was 66. The minimum score that the participants could get was 0 and the maximum score was 5. For the English literal questions, the participants scored a mean of 1.9 and a standard deviation of 1.2. The

participants scored a mean score of 1.8 for the isiZulu literal questions and a standard deviation of 1. Participants scored low points in both languages. These results show that the participants literal comprehension was poor, scoring a percentage of 38 and 36 for English and isiZulu respectively. As with the Grade 3 results, the participants have performed below the international benchmark of 75%.

Table 30 Grade 4 post-test results in literal questions

	Sample size	minimum	Maximum	Mean	Standard Deviation
Literal Comprehension English	66	0	5	1.5	1
Literal Comprehension isiZulu	66	0	5	1.3	0.8

Table 30 shows the participants’ results in the literal questions of the reading comprehension assessment post-test. In total there were 66 participants who wrote a reading comprehension in both isiZulu and in English. The minimum score that each participant could get was 0 and the maximum score was 5.

The mean score for the literal comprehension in the English assessment was 1.5. This is a low mean (of 30%) and is below the international reading benchmark (75%). The mean was at 30% whereas the international benchmark is 75%. This result highlights that the participants found recalling information from texts that were written in English challenging. In addition there are implications for participants ability to decode texts as well as possible issues with language comprehension. If participants were unable to retrieve information from the texts, they showed that they had challenges decoding the texts because there was not enough independent reading that the participants did either at home or in the classroom. The

classroom observations done did not show any of the participants reading independently. While only one lesson was observed per class, one can argue that independent reading has to be implemented during lessons and teachers should ask comprehension questions to assess learners' progress.

The standard deviation of the results of the English literal questions was one which shows that this was a homogenous cohort of participants and that the results are a reliable representation of the results that have been achieved by each participant.

Similarly, the results attained by the participants in the isiZulu literal comprehension assessment were below the international benchmark of 75%. Noteworthy, is that the participants results in the literal comprehension for isiZulu were lower than those attained in English. IsiZulu is the participants' home language; the participants had linguistic comprehension in the language, however, this did not translate to a higher mark in isiZulu. The participants' mean score for isiZulu was 1.34 and the standard deviation is 0.8. The results of the participants reveals that this is a homogenous cohort and that the challenge is experienced by all the participants. The issue for both languages is arguably participants' ability to decode the texts as in isiZulu, the linguistic comprehension was there for majority of the participants. The implication is that the participants' reading needs to improve significantly if the results were to improve. It is evident that to a certain extent participants may have been exposed to reading more texts in English compared to their home language thus impacting their ability to decode texts in the two languages.

Figure 14 Grade 4 literal comprehension English and isiZulu pre- and post-test

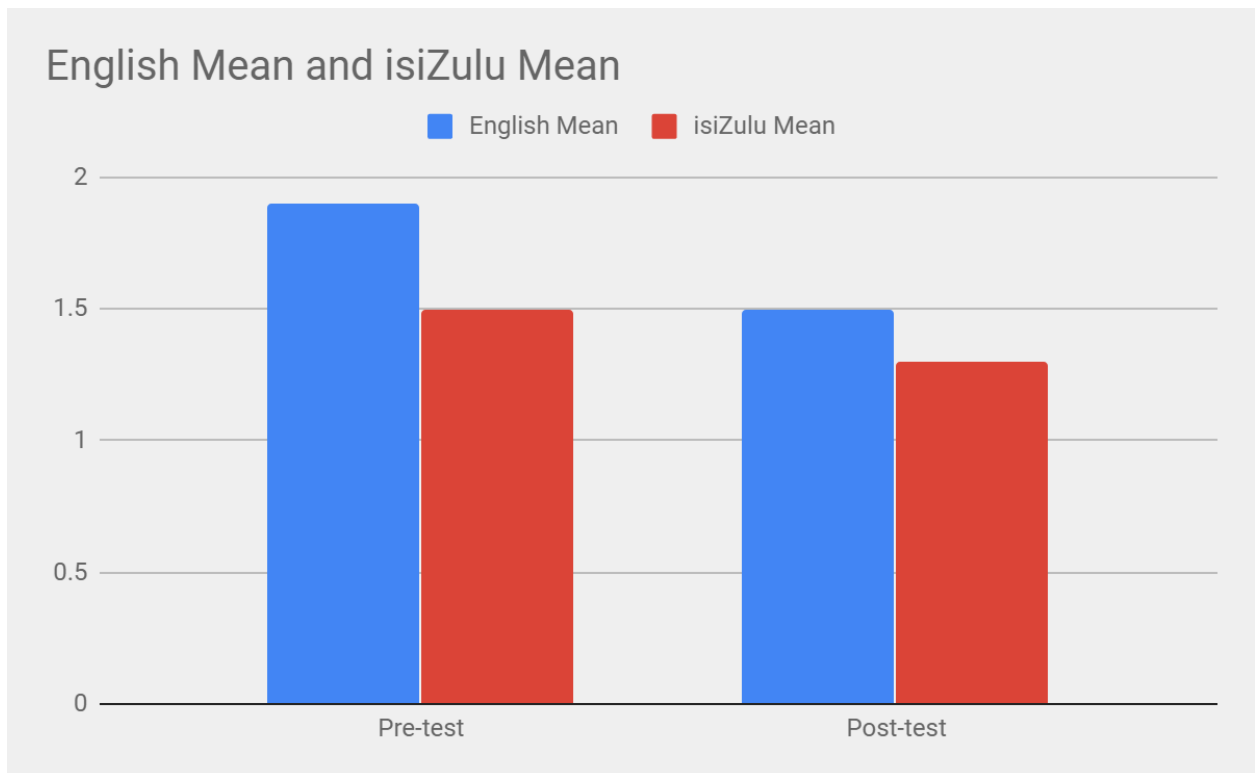


Figure 14 shows a visual representation of the literal comprehension scores in both English and isiZulu, pre- and post-test. The results are juxtaposed in the graph showing that participants performed better in English than in isiZulu and that the result declined in the post test for both languages. The participants struggled to locate and retrieve information explicitly from the literary passages that they read. It is concerning that the results show that the Grade 4 participants scored far below the 75% benchmark that is aimed for in both the pre- and post-tests. This result does not come as a surprise, however, as only 51% of the South African learners who participated in the PIRLS study (2016) were able to reach the low benchmark. This study further highlights the reading challenges faced by learners.

4.4.4 Grade 4 Inferential Comprehension

The Grade 4 participants were required to write a reading comprehension assessment. Reading comprehension assessments measure the participants understanding of the texts that they read. In addition to asking recall or literal questions, the assessment required the participants to answer inference questions. The inference questions assess participants' ability to make deductions and draw conclusions based on what they have read instead of

lifting information directly from the text. Participants' ability to make inferences shows a deeper level of the participants reading comprehension. Below is a table that shows the results of Grade 4 participants' inferencing skills.

Table 31 Grade 4 pre-test results in inferential comprehension

	Sample size	minimum	maximum	Mean	Standard Deviation
Inferential Comprehension English	66	0	2	0.17	0.47
Inferential Comprehension Home language isiZulu	66	0	2	0.26	0.5

Table 31 shows the results of Grade 4 participants in inferential comprehension pre-test. The table shows that the sample size was 66 participants who could score a minimum of 0 and a maximum of 2. The mean score obtained by the participants was 0.17 for English, while they scored a mean score of 0.26, for isiZulu. The trend shown in the table is that participants' performance was low in both their home language and first additional language. The standard deviation for both languages was higher than the mean.

Table 32 Grade 4 post-test results in inferential comprehension

	Sample size	minimum	maximum	Mean	Standard Deviation
Inferential Comprehension English	66	0	2	0.08	0.27
Inferential Comprehension Home language	66	0	2	0.06	0.31

Table 32 represents the results of Grade 4 participants inference results in the reading comprehension assessment. A total of 66 participants completed the assessment. The minimum score that the participants could attain was 0 and the maximum score that the participants could attain was 2. The mean score for the inferential comprehension was 0.08 for English and 0.06. Both scores were low and the standard deviation highlights the extent to which the participants results varied and lacked homogeneity.

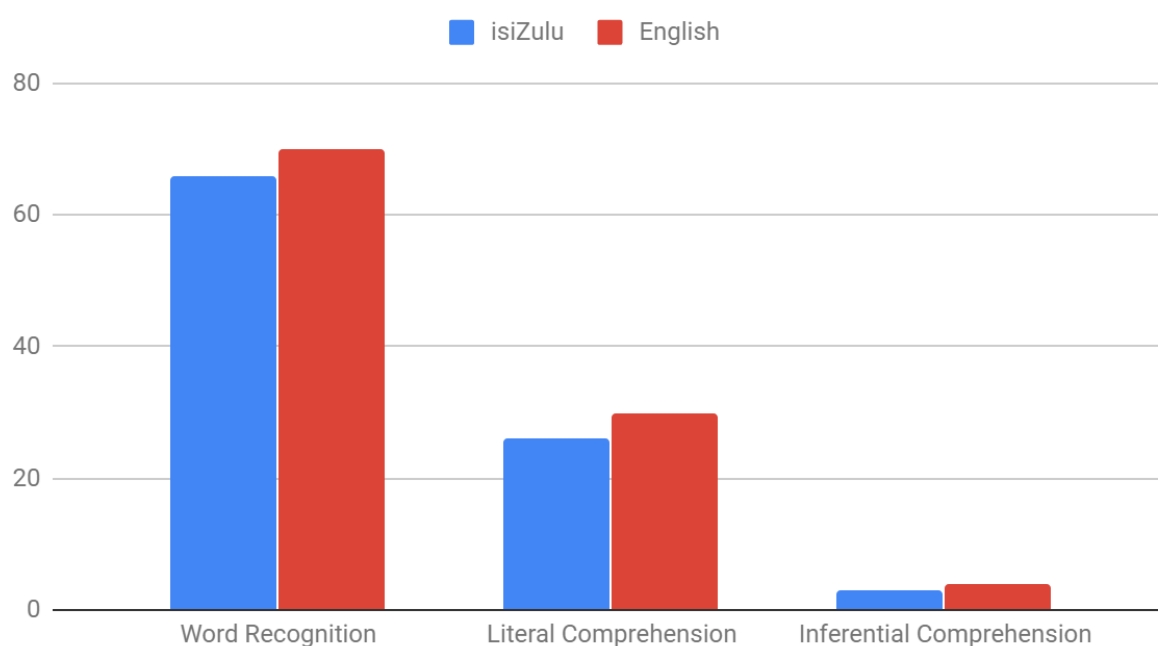
The data collected in this study had three main areas of focus. The literacy events during two lessons were observed, secondly, the literacy events in the classroom environments were observed through a close study of the print environment and lastly, participants were assessed in more in their home language (isiZulu) and their first additional language (English).

4.5 Multilingual reading development of Grade 3 and 4 learners

This section of the study compares the post-test results of the Grade 3 and 4 participants so as to report on the transition from foundation phase to intermediate phase. The study is assessing whether the participants' literacy development is better in Grade 4.

Figure 15 Word recognition, literal and inferential comprehension percentages

isiZulu and English



The study assessed Grade 3 and Grade 4 participants to analyse the transition from the foundation phase to the intermediate phase with the understanding that, “in the Foundation Phase... children are ‘learning to read’ but from Grade 4 onwards they are meant to be ‘reading to learn’...” (Spaull, 2016). Figure 15 is a visual representation showing that the Grade 3 participants got above sixty percent for word recognition in isiZulu and English. In assessing the level at which the grade 3 participants had learned to read, the study found that the participants scored above 60% in both isiZulu and English. This result is lower than the international benchmark of 75%, however, noteworthy and perhaps concerning is that when compared to the grade 4 results which are the literal and inferential comprehension, the word recognition is significantly higher. Therefore the study concludes that the participants showed

a higher level of knowing how to read and decode words yet the transition to 'reading to learn' is proven to be unsuccessful with the grade 4 participants scoring below 30% in their literal and inferential comprehension assessments. Furthermore, the gap increased with the level of cognitive demand of the question. The inferential results as shown in the graph were poor and significantly lower than the word recognition and the inferential questions.

The results show that the participants are unable to make the transition from the concrete to a higher level of abstraction. In addition, the graph shows that the transition from Grade 3 is a downward slope representing what is the Grade 4 slump. This result highlights the importance of pedagogical strategies that will improve learners' ability to read for meaning in more than one language.

4.6 Conclusion

Chapter 4 of the study presented the findings of the study in relation to the 4 objectives of the study. The chapter presented and analysed the data presented in relation to the focal points of the study which were:

1. Literacy Events
2. Teachers' metacognitive reflections
3. Grade 3 and 4 learners' literal and inferential comprehension gains in the post intervention phase
4. Multilingual reading development of Grade 3 and 4 learners

The findings revealed that the literacy events that took place in the classrooms showed low teacher impact. The participants' (learners') engagement with the observed literacy events were not consistent in majority of the learners. Secondly, the data presented revealed that the teachers were aware of the learners' difficulties with reading; however, their views on their learners literacy skills were that learners' reading abilities were higher than the results found from the assessments that learners wrote in both isiZulu and English. What the teachers were aware of (which was consistent with the learners' results in the assessments) was that the learners' reading ability in English was better than isiZulu.

The data presented from the battery of tests further highlighted the concerning literacy levels of the learners' as highlighted in a number of the literacy studies including (PIRLS, EGRS). The multilingual reading development finding show that the transition from grade 3 to grade 4 is another cause for concern as the learners' results in grade 4 were lower than the grade 3 results in both languages which confirms that the cohort from this study is affected by the grade 4 slump.

The study highlighted some key issues in the grade 3 and 4 literacy studies which call for further, prolonged translingual treatment that is followed up and teachers and learners are given further support to improve the literacy in the multilingual classrooms.

5.1 Chapter 5

Chapter 5 of the study is a presentation of the summary of each chapter in the study as well as the major findings and finally the conclusion of the study.

5.2 Summary of the Study

5.2.1 Chapter 1

The aim of the study was to investigate the effectiveness of using translanguaging treatment measures on reading literacy trajectories in two Gauteng primary schools. The study had four main objectives that were used to meet the aim of the study. The objectives of the study were as follows: Firstly, to evaluate teachers' translingual classroom practices by focusing on the literacy events that took place in the observed classrooms. Secondly, to evaluate teachers' metacognitive reflections on translanguaging pedagogy. The third objective was to assess grade 3 and 4 learners' literal and inferential comprehension proficiency in more than one language in the pre- and post-tests. Lastly, to compare grade 3 and 4 learners' reading development where more than one language is used.

To achieve the aim of the study, a baseline literacy practices assessment and transitional literacy measures between Grade 3 and 4 readers were carried out to understand systemic reading trajectories that span over time.

The first objective of the study was to evaluate the teachers' translingual classroom practices by focusing on the literacy events that took place in the observed lessons. 'Literacy events' refers to the actual reading and writing as well as the opportunities to read and write that took place in more than one language during classroom observations. These literacy events were recorded by means of an observation protocol which was completed by the researcher at different intervals during the lessons under observation. In addition, an Active Teaching Rubric was completed. The rubric focused on the teachers in the observed classrooms. Particularly, the focus was on whether the lessons were goal orientated, if the tasks were challenging and the classroom climate (whether it was positive or not).

The second objective of evaluating teachers' metacognitive reflections on translanguaging pedagogy was achieved by the completion of a questionnaire by each of the observed

teachers as well as an interview which questioned teachers about their understanding of translingual pedagogy as well as their views on it.

The objective of assessing grade 3 and 4 learners' literal and inferential comprehension proficiency in more than one language in the pre- and post-tests was achieved by the assessments that were written by the participants. The results of the assessments were then analysed to determine the participants literacy competencies.

The final objective of comparing grade 3 and 4 learners' reading development where more than one language was used was achieved by using the results achieved by the grade 3 and grade 4 participants and analysing the trends, assessing if there was development from grade 3 to 4 or if the results would be worse in grade 4.

The data collected during the study ensured that the objectives of the study were achieved and enabled an investigation of the effectiveness of using translanguaging treatment measures on reading literacy trajectories in two Gauteng primary schools.

5.2.2 Chapter 2

Chapter 2 of the study provided an overview of the theoretical frameworks that underpinned the study on translanguaging and reading literacy in early grades. In addition, it offered a review of the relevant and most current literature on empirical works on the use of translanguaging strategies in literacy classrooms worldwide.

The study highlighted the interplay between both the cognitive and sociocultural perspectives. The key concepts that this study highlighted were: automaticity, the simple view of reading as well as translanguaging. The empirical studies discussed and analysed in chapter two tackled the themes that were relevant to the study which included: early grade reading, translanguaging as a pedagogical strategy, oral classroom interactions and teachers' perspectives. While the studies related to this study, the gap in the existing body of knowledge was highlighted in the chapter which in turn justified the significance of the study.

5.2.3 Chapter 3

The third chapter of the study was a reflection of the methodology applied in the study to achieve the aim of the study. The study employed a concurrent mixed method design to

get adequate data to fulfil the aim of the study. The qualitative data was gathered using questionnaires, interview schedules and classroom observations. Furthermore, the quantitative data was gathered through the battery of tests that were written by the participants in Grades 3 and 4.

In addition to the discussion of the research design, Chapter 3 discussed the sampling, the participants, validity and reliability of the study as well as the ethical considerations.

5.2.3 Chapter 4

Chapter 4 the study presented the data collected from the study and an interpretation of each of the findings of the study in relation to each of the study's objectives. The findings of the study will be summarised in the next session of the chapter.

5.2.4 Conclusion of the study

The study set out to investigate the effectiveness of using translanguaging treatment measures on reading literacy trajectories in two Gauteng primary schools by using the concurrent mixed method design. This methodology was used as a way of achieving the following objectives:

1. To evaluate teachers' translingual classroom practices by focusing on the literacy events that took place in the observed classrooms.
2. To evaluate teachers' metacognitive reflections on translanguaging pedagogy.
3. To assess Grade 3 and 4 learners' literal and inferential comprehension proficiency in more than one language in the pre- and post-tests.
4. To compare grade 3 and 4 learners' reading development where more than one language is used.

Literacy Events

The study found that while there are a number of literacy events that take place in the classrooms, the quality of these interactions could be improved. The results showed that, while participants were engaged in literacy events, there were a number of learners that were not engaged in the literacy events and in some cases the engagement only took place in the second round of observations for some participants. Due to the mean numbers of the

participants engaged in the literacy events being low, it was revealed that teacher impact in these classrooms was low.

Teachers' Metacognitive Reflection

The study established that the teachers that were interviewed and whose classes were observed all stated that they taught reading and writing to their learners. The teachers rated themselves on a scale from one – four (1- 4) and showed confidence in their learners' literacy levels. Furthermore the teachers acknowledged that their learners' experienced reading difficulties in both isiZulu and English. Noteworthy was that the teachers highlighted that their learners reading ability in their home language (isiZulu) was lower than their reading ability in their first additional language (English).

Grade 3 and 4 learners' literal and inferential comprehension gains in the post intervention phase

The study found that both the grade 3 and 4 learners' literal and inferential comprehension in the pre-test was significantly lower than the international benchmark of 75% and this particular finding was also noted in previous studies (PIRLS, EGRS) cited in the present study. Of importance for this study was noting the possible gains in the post test. The study found that there were gains in some of the learners post-test results; however, the gains were not consistent in both isiZulu and English across the grades.

Grade 3 and 4 learners' reading development where more than one language was used

The fourth objective of the study focused on the transition from Grade 3 to Grade 4. The study compared the learners performance in the last grade of the foundation phase to their performance in the first year of the intermediate phase.

5.3 Limitations of the Study

The limitations of this study relate to the breadth and scope of the study. The study focused on isiZulu and English whereas there are other languages that are taught and ought to be included in multilingual literacy classrooms to accommodate the diversity of the learners. It is thus recommended that additional research be carried out to investigate different languages.

The sample size of the study was relatively small and the qualitative data gathered on teachers' metacognitive perspectives was based on the experiences and views that are specific to the teachers who participated in this study thus generalisations could not be drawn.

5.4 Recommendations

In spite of the limitations of the study, the data collected presented information that may be valuable for the understanding of multilingual education and the transition from Grade 3 to Grade 4. Furthermore, stakeholders such as policy makers and teachers need to intentionally use learner's linguistic repertoire as a way to enable learners' meaning making.

5.4.3 Further research

Based on the findings of the study, it is evident that further research needs to be conducted on ways to improve the literacy skills of learners. While the hypotheses of the study were not proven to be accurate, the study made significant findings that require further research.

There is a need for further research into the effective use of translingual education in South African classrooms as it considers all learners' linguistic repertoires and how that may be developed to improve learners' literacy skills. That research should include more of the languages used in South Africa, so as to make a significant shift from the monolingual bias and the separation of languages.

Furthermore translingual treatment is needed in more schools and teachers need to be educated of effective pedagogical strategies that will aid and enrich the literacy events that take place in classrooms.

Finally, the translingual treatment should be closely followed up to ensure that teachers and learners are supported and their progress needs to be closely monitored over a prolonged period of time in order for the gains to have a greater impact on the improvement of the learners' multilingual literacy skills.

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Appendix A

WORD RECOGNITION: ISIZULU

Yebo

Hleka

Imoto

Ubaba

Inkomo

APPENDIX B

WORD RECOGNITION: ENGLISH

Boy

Father

Train

Drink

Sleep

APPENDIX C

COMPREHENSION

Personal details:

Name..... School.....

Teacher..... Grade.....

Date Gender.....

Data collector.....

Disagree

Agree

What do you think?







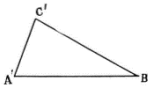

- | | | |
|---------------------------------------|--------------------------|--------------------------|
| 1. I like reading | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. I learn things from reading | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. We read a lot in school | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. I like reading in my home language | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. My parents read books for me | <input type="checkbox"/> | <input type="checkbox"/> |






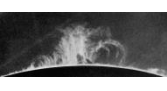

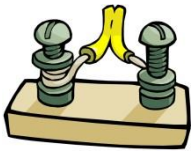






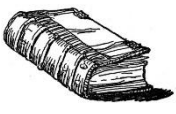
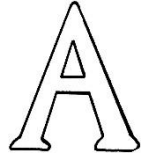
Section A

Listen to the word the teacher says. Find the picture that goes with the word. Put an X in the small box under the correct picture. Write the correct word in the first box on the left.





Questions from 1 to 5 are in English and 6 to 10 are in IsiZulu.




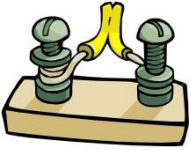
Example





<p>-</p> <p>Flower</p> <p>-</p>	 <p><input type="checkbox"/></p>	 <p><input checked="" type="checkbox"/></p>	 <p><input type="checkbox"/></p>	 <p><input type="checkbox"/></p>
<p>1.</p> <p>_____</p>	 <p><input type="checkbox"/></p>	 <p><input type="checkbox"/></p>	 <p><input type="checkbox"/></p>	 <p><input type="checkbox"/></p>





2. _____				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. _____				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. _____				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. _____				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





IsiZulu version


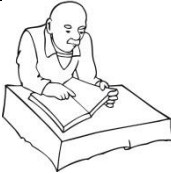


_____ Inkukhu _____				
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6.				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9.				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10.				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section B

Match the following words to the four possible pictures provided (Answer all questions 1-10) :

1. Body parts



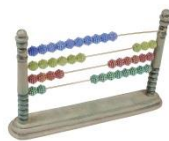
2. Road Sign



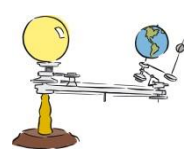
3. Food



4. Count



5. Transport

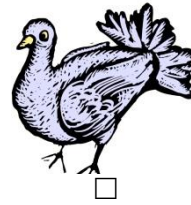


IsiZulu version

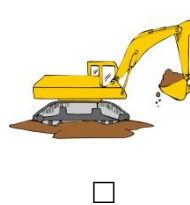
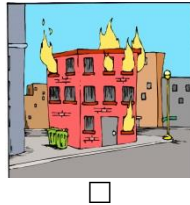
6. Umgqomo



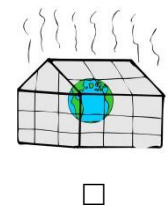
7. Nyama



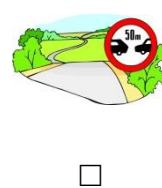
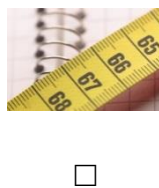
8. Umlilo



9. Incwadi



10. Kuthunga



Section C

Read the story that follows. After you finish reading, answer each of the questions at the end.

THE ANTS AND THE SNAKE

There were ten eggs in partridge's nest: beautiful, round, light green eggs. Snake slid up to the nest and chased partridge from her nest. He said, "Go away. These eggs are mine." He coiled his body around and around the eggs. He lay there, quiet still. Partridge could not get near her nest or her beautiful round eggs. Partridge was very angry, so she called all the animals. She said, "Come and help me, please. Come and help me! Come and help me!"	16 33 50 67 83 98
Elephant heard her cries. He came and said, "What is the matter, partridge?" "Oh," cried partridge, "Snake has coiled his body around my eggs and I cannot get to them. I needed somebody sensible to chase snake away." "Don't worry, partridge," Elephant said. "I will step on snake and squash him, like this." And he stamped on his big feet down on the ground. Partridge flapped her wings and cried out loud, "No, no! Not you. If you step on snake you will break all my eggs. I need somebody sensible to chase snake away." all the animals came, one after the other, and said to partridge, "We would like to help you." But she told them to go away. "You are too big. You will break my eggs," she said.	115 128 146 163 180 194 214 232
Poor partridge was very worried. Snake was still lying in her nest. Just then a family of Red Ants came along. They said, "Partridge, we heard your cries from far away. We have come to help you." the ants went right up to snake. They crawled all over snake. They crawled under snake. They climbed onto snake. All the time they bit him with their small, sharp jaws. Bite, bite, bite, in all the soft places on snake's body. Snake soon uncoiled from around the eggs and slid away as fast as he could. That is how partridge got her eggs back. Not even one egg was broken.	249 266 283

1. What does the story tell us?

- Big animals cannot help small ones
- Snakes are dangerous
- The ants are clever

The weak can sometimes defeat the strong.

2. Which of these things happened first? The snake –

The ants killed the elephant.

The snake coiled his body around the eggs

The elephant broke Partridge's eggs

The snake chased Partridge from her nest.

3. What did the ants do to stop the snake from coiling at partridge's eggs?

The ants bite the snake

The ants killed the snake

The ants threatened the snake

The ants climbed onto the the snake.

4. Which phrase in the story tells us that the Elephant thinks that he can help Partridge?

What is the matter...?

I will step on snake...

Don't worry...

Elephant killed the snake.

5. The story ends happily because?

The snake ran away

Partridge got her eggs back

The elephant killed the snake

The ants killed the snake.

6. If you were partridge, what can you do to stop the snake?

(Write your answer in the space below.)

7. Re-tell the story in isiZulu (summarize)

Inyoni ne Ndlovu

Kwakukhona isihlahla esikhulu esasimile phakathi ehlathini. Phezulu esihlahleni kwakunenyoni encane eyase izenzele isidleke sayo. Esidlekeni kwabe kunamaphuphu (abantwana benyoni). Ngelinye ilanga kwafika indlovu yafika yazinwaya emhlane ngesihlahla. Isihlahla sanyakaza kakhulu saze sahlephuka. Amaphuphu afikelwa ngukwesaba okukhulu maqede azama ukuzifihla kunina. Umama wamaphuphu waveza umlomo wakhe ngaphandle kwesidleke, wamemeza wathi, “ <u>Hheyi silwane esikhulu</u> , kukhona izihlahla eziningi lapha! Yini unyakazise lesi? Izingane zami ziyesaba manje, futhi zingawa kulesi sidleke.”	8 17 27 36 46 57 71
Indlovu ayishongo lutho, kodwa yabuka inyoni ngeso layo elincane, yanyakazisa amadlebe amakhulu emoyeni, yasuka yahamba.	81 85 94
Ngosuku olulandelayo, indlovu yabuya futhi yazinwaya esihlahleni. Isihlahla saqala sanyakaza. Izingane zenyoni ezithukile zaphinda futhi zazifihla emaphikweni kamama wazo. Ngaleso	104 112

sikhathi umama wamaphuphu owayesethukuthele kakhulu wamemeza wathi, “Ngithi yeka ukunyakazisa isihlahla sethu.” “Ungasenzani isilwane esikhulu njengami?”, kuhleka indlovu.	117
Ukuba bengifuna, bengizonyakazisa lesi sihlahla kakhulu ukuze isidleke sakho nezingane zakho ziwe futhi ziphoseke le kude.”. Indlovu yabe seyihamba.	125
Ngosuku olulandelayo, indlovu yabuya yanyakazisa isihlahla futhi. Ngokushesha okukhulu, inyoni yandiza yawela phezu kwenye yamadlebe amakhulu endlovu, khona lapho, yathinta indlovu ngokuyidllokoza ngezinzwane zayo. Indlovu yezwa ubuhlungu yase inyakazisa ikhanda layo kodwa kwangenzeka lutho. Yabe isixolisa enyonini iyicela ukuthi ihambe futhi yathembisa ukuthi angeke iphinde inyakazise isihlahla. Inyoni yandiza yashiya indlebe yendlovu yabuyela esidlekeni sayo.	131
	136
	145
	157
	163
	174
	182
	199
Kusuka ngalelo langa indlovu ayiphindanga yabuya yazozinwaya umhlane wayo kuleso sihlahla.	

Bhala isiphambano esikokeleni esifanele

1. Le ndaba isifundisani? Isifundisa ukuthi –
 - Ongenamandla kungenzeka amehlule onamandla
 - Uma unamandla ungahlupha abanye.
 - Izindlovu akufanele zinyakazise izihlahla.
 - Bhekana nengozi.
2. Yikuphi kulezi zinto okwenzeka kuqala? Inyoni -
 - Yaxwayisa abantwana bayo.
 - Yayitshela ukuthi iye kozenwaya kwenye indawo.
 - Yawina umncintiswano.
 - Yethusa indlovu.
3. Yimuphi umusho kule ndaba ositshela ukuthi indlovu icabanga ukuthi inamandla amakhulu?
 - “Hheyi, silwane esikhulu...”
 - Indlovu ayishongo lutho.
 - “Ungasenzani...”
 - Ngosuku olulandelayo, indlovu yabuya...
4. Yenzani inyoni ukuze indlovu ingaphinde ibuye?
 - Inyoni yatshela indlovu ukuba igcine ukuza

- Inyoni yaluma indlovu
- Inyoni yasebenzisa izinzwane zayo ukuklwebha indlovu eqolo
- Inyoni yasebenzisa izinzwane zayo ukuklwebha indlovu endlebeni

5. Indaba iphela kahle ngoba -

- Indlovu yafa
- Isihlahla sasiqinile
- Indlovu ayiphindanga yabuya esihlahleni
- Amaphuphu (abantwana benyoni) bafunda ukundiza

6. Ucabanga ukuthi yini enye eyayingenziwa inyoni ukuvimba indlovu ukuthi izozinwaya ngesihlahla ngaphandle kokuyidlokoloza indlebe ngezinzwane zayo?

(Bhala umbono wakho kulesi sikhala osinikiwe ngezansi.)

7. Ake ufinqe le ndaba oyifundile ngesiNgisi.

Thank you for your participation. Siyabonga.

APPENDIX D

PHONOLOGICAL AWARENESS

Name..... School.....

Grade..... Teacher.....

Date..... Gender.....

Data Collector.....

Phonological Awareness

English version

1. Item : baby

Target : ball

Distractor : cat

2. Item : rake

Target : cake

Distractor : flower

3. Item : bird

Target : bag

Distractor : tree

4. Item : tree

Target : tea

Distractor : pencil

5. Item : frog

Target : dog

Distractor : rat

IsiZulu version

1. Item : Idada

Target : Isihlahla

Distractor : Umfula

2. Item : Umuntu

Target : Umlilo

Distractor : Inkomo

3. Item : Iklabishi

Target : Khala

Distractor : Idwala

4. Item : Ibhola

Target : Ibhubesi

Distractor : Indlu

5. Item : Inkomishi

Target : Inkosi

Distractor : Umtwana