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Trajectories of the effects of translanguaging on reading comprehension among IsiXhosa-English multilingual learners

By

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THESIS

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Declaration

I, Vukile Desmond Mgijima, student number 0209173y, declare that this thesis entitled '***Trajectories of the effects of translanguaging on reading comprehension among IsiXhosa-English multilingual learners'*** submitted for the Degree of Doctor of Philosophy in English Education at the University of the Witwatersrand, Johannesburg is my own work. All the sources that I have consulted have been duly acknowledged. It has not been submitted for examination for any degree in any other institution before.

Signature:…….

Date: …….

Acknowledgements

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I also acknowledge and thank the principals, the teachers and learners of the schools that participated in the study. I appreciate their generosity, time and contribution.

Dedication

I dedicate this work to my mom, MamDawini ‘Tau’ Mgijima, my fiancée Dr Mpumie Masondo, and my siblings Thandiwe, Thandiswa and Vuyani. I also dedicate this work to my dad, Chief Gingqi Manyala Mgijima. I wish he were still alive so that we could rejoice together on such a remarkable achievement.

Abstract

This study investigated the effects of translanguaging techniques on the reading abilities of bilingual IsiXhosa (L1) - English (L2) learners in Grade 4. It focused on the influence of the techniques on the learners' ability to recall information, their text reorganisation skills, and their ability to make prediction and draw inferences when reading texts. In this study, the linguistic interdependence and the threshold hypotheses, in comparison with translanguaging techniques, have been used as the framework. The study adopted a Solomon four quasi-experimental design in which a total of 215 learners from 4 different primary schools participated. Data were collected through a battery of tests written by the learners from the 4 schools.

The findings demonstrated that translanguaging techniques in which two languages are used simultaneously in one lesson have a positive impact on the reading comprehension skills of the learners. The findings also indicated that reading comprehension is determined by a number of factors, which include the reader's familiarity with the content, the context of the reading text, the vocabulary used therein, and the reader's writing skills in general. Thus, the text and the reader's knowledge of the word, the world and the language ought to match. In other words, comprehension may be hampered by the reader's lack of relevant background, linguistic knowledge, or when the task demands exceed the readers' available pragmatic knowledge.

It is recommended that teacher training institutions, curriculum designers and educators in South Africa and elsewhere should create an enabling environment for learners to freely use their tongues and minds. It is only when the linguistic barriers are removed that bilingual education can truly enable multilingual learners to acquire knowledge and express the same using various languages and semiotic repertoires.

Keywords: inferencing; information recall; text prediction; text reorganisation; translanguaging; reading comprehension; New Literacy Studies

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Chapter One: Introduction

1.1 Background to the study

Reading empowers one to meet their most vital needs and enhances meaningful participation in social, cultural, political, and economical domains of postmodern communities (UNESCO, 2006). However, there are many countries in the world with dismal reading literacy rates. A recent United Nations Education, Science and Cultural Organization (UNESCO) report shows that the rate of reading ability of the world's youth aged between 15 and 24 years is estimated to be at 91.30% (UNESCO, 2015). Even though this seems positive, many African countries contribute so little to the statistics. This is because many African countries rank very low in terms of their youth reading ability. For instance, the UNESCO report further shows that Burkina Faso (at 45.43%), Guinea (at 45.25%), Central African Republic (at 36.36%), and Niger (at 26.56%) have the smallest number of youth who can read in relation to the entire world. Nonetheless, the UNESCO report's estimation on the youth reading ability might not be a reliable reflection of the actual literacy rate of the youth in Africa since the said ability is confined to reading and writing only in the erstwhile colonial languages, and not in the participants' indigenous languages.

South Africa is not listed among the countries that have a high number of youth who cannot read. However, there have been concerns about the declining standards of reading ability at elementary grades. According to Annual National Assessments (ANA) conducted in 2011, only between 30% and 40% of learners in grades 2 to 7 could reach at least 'partially achieved' level (that is, between 35% and 49%) of performance while the percentage of learners reaching 'achieved' level (between 50% and 69%) of performance varied from 12% to 31% (DBE, 2011a). Progress in International Reading Literacy Study (PIRLS) 2011, an international reading assessment and benchmark test based on the testing of Grade 4 and 5 learners in which 49 Organisation for Economic Cooperation and Development (OECD) countries participated, shows that South African Grade 4 learners, particularly those tested in African languages, achieved well below the international centre point despite having written an easier, shorter, simpler assessment whose questions are designed for low cognitive levels, called prePIRLS (Howie, et al., 2012; Howie, et al., 2017). The annual national assessments

(DBE, 2014a) show some discrepancy in learner performance between Home Language (an African Language) and First Additional Language (English). For instance, for the past 3 years, only 60% of grade 3 learners have managed to obtain more than 50% in Home Language, whereas only 36% could in First Additional Language. Makalela (2012) contends that if African languages were to be given space in the learning environment, learners would be better at reading comprehension in their Home Language, whose skills could then aid performance in First Additional Language. Nonetheless, there are several other possible factors that hinder learners' reading ability. These include lack of reading material, underprepared teachers, lack of commitment to teach by teachers, and lack of support for learners at home (Modisaotsile, 2012). Other factors, to which not much attention is being paid, include monolingual models, practices and approaches that have dominated the field of reading literacy for a very long time. Historically, reading has always been construed from individualistic and psychological models which perpetuated the belief that an education system should only be carried out through one language. This one-ness ideology was influenced by European ideals of a nation state under the pretext of one nation, one language that led to monolithic views about languages, which now, as Makalela puts it, "need to be critiqued in the global world where pluralism is the norm" (Makalela, 2014, p. 670).

On the one hand, current research questions the validity of language boundaries in literacy and applied language studies in multilingual communities (Baker, Jones & Lewis, 2012) while the orthodox practices, on the other, are still virtually linear and monolingual in orientation. Reading development is done sequentially - in one language at a time - and languages in which reading can be taught are treated as separate and unrelated entities in multilingual classrooms regardless of the common knowledge that is imparted. It is against this background that this study seeks to investigate alternative ways in which bilingual reading development can be enhanced through the use of two languages in the same lesson in grade 4 classes. This purposive alternation of the language of input and output is referred to as translanguaging (García, 2009; Makalela, 2014; Hornberger & Link, 2012).

1.2 Research problem

Existing research (Prinsloo & Heugh, 2013; Zimmerman, 2014; Makalela & Fakude, 2014) indicates that learners at elementary grades have a problem with comprehending written texts, regardless of the language the text is in: they often decode print information without any clear evidence of comprehension whatsoever. According to Manyike (2012), 132 of the 153 (i.e., 86%) learners who participated in their study scored below the 40% pass mark in the comprehension component of a Reading Performance Test in their Home Language, Xitsonga; and the largest group of scores (which is, 72.55%) ranged between 3 and 7 out of maximum possible score of 22. Similarly, in one study which investigated oral reading proficiency of 57 grade 4 – 7 Sepedi mother tongue readers, Makalela (2012) observed that the learners who participated in the study read at the elementary reading proficiency level - the level equivalent to that of learners between grade 1 to 3. In essence, learners at elementary grades do not acquire enough reading comprehension skills, and that, consequently, curtails their ability to read independently and cope with subsequent academic demands.

The annual national assessment reports (DoE, 2011b; 2012; 2013, 2014) show that learners read below the expected national and international levels. Less than 34% of the grade 4 learners reached the 'achieved' level of performance in the ANA in 2011. A closer look at the results shows a decline of performance, with learners in grade 1 performing better, and then the performance getting poor and then poorer in the subsequent grades. The declining performance is attributed to the learners' poor reading proficiency which gets poorer as learners progress to higher grades (Madiba, 2013). This is a cause for grave concern, and has prompted the current study.

In order to improve learner performance in reading, and to enable the education system to produce learners who are confident, literate, and able to participate in society as critical and active citizens, an environment that enables learners to learn and express themselves in various languages at the same time, inconsiderate of time and space in the school ought to be created. Currently, IsiXhosa is used as the medium of instruction in most of the schools in the Eastern Cape from grade 1 to grade 3, while English is taught as a subject. From grade 4

upward, English is used as the medium of instruction and IsiXhosa is learned as a subject. In practice, these languages are taught separately, with lessons for each taught during its own scheduled period, by a designated teacher, in a specified classroom. In effect, reading in each of these languages is taught separately from the other, regardless of the common underlying proficiency sought to be addressed in both. Thus, the separate development of reading skills according to languages does not seem to be doing any justice to the South African multilingual and multicultural peoples, hence the slump in grade 4. It ignores the naturally dynamic and heteroglossic language practices often exhibited in multilingual communities which the learners bring to school.

Translanguaging, a language technique that advocates for the simultaneous natural use of 2 languages in one lesson, has been found to offer the opportunity to alleviate the separation of reading development according to languages in one classroom (García, 2009; Makalela & Fakude, 2014; Hornberger & Link, 2012). Its potential has not, however, been fully exploited in the South African school setting regardless of the learners' and teachers' subtle indications of the desire to translanguage (see DoE, 2011c; Probyn, 2009, 2015). So far, there is a paucity of research that investigated the impact of alternative literacy models that are multilingual in orientation. This research has, therefore, experimented the effects of teaching and assessing reading comprehension using both IsiXhosa and English simultaneously in the same lesson.

1.3 Research aim

The aim of this study was to investigate the effects of translanguaging techniques on the reading abilities of bilingual IsiXhosa (L1) and English (L2) learners in Grade 4. It sought to meet the following overlapping objectives:

- to evaluate information recall ability of the learners in IsiXhosa and English;
- to assess how well the learners draw inferences from the texts they read in IsiXhosa and English;
- to assess the text prediction skills of the learners in IsiXhosa and English; and
- to evaluate the learners' ability to reorganise ideas from the texts they read in IsiXhosa and English.

The findings for each of the above variables were tested against the alternative hypothesis which posited that performance of the participants on the target abilities would vary in both languages and throughout the groups due to the intervention, while the null hypothesis posited that performance of the participants on the target abilities would remain the same in both languages and throughout the groups regardless of the intervention. Thus, there were 4 null hypotheses and their alternatives against which each of the variables were tested. Each of the hypotheses had predicted as follows:

H_0 1: there would be no statistically significant difference in learner performance on information recall abilities in IsiXhosa and English, respectively, when their performance is compared within and between the groups regardless of the intervention.

H_1 1: there would be a statistically significant difference in learner performance on information recall abilities in IsiXhosa and English, respectively, when their performance is compared within and between the groups due to the intervention.

H_0 2: there would be no statistically significant difference in learner performance on the ability to draw inferences from the texts they read in IsiXhosa and English, respectively, when their performance is compared within and between the groups regardless of the intervention.

H_1 2: there would be a statistically significant difference in learner performance on the ability to draw inferences from the texts they read in IsiXhosa and English, respectively, when their performance is compared within and between the groups due to the intervention.

H_0 3: there would be no statistically significant difference in learner performance on the ability to predict how the events might unfold in the reading text in IsiXhosa and English, respectively, when their performance is compared within and between the groups regardless of the intervention.

H_1 3: there would be a statistically significant difference in learner performance on the ability to predict how the events might unfold in the reading text in IsiXhosa and English, respectively, when their performance is compared within and between the groups due to the intervention.

H_0 4: there would be no statistically significant difference in learner performance on their ability to reorganise ideas from the texts they read in IsiXhosa and English,

respectively, when their performance is compared within and between the groups regardless of the intervention.

H_1 4: there would be a statistically significant difference in learner performance on their ability to reorganise ideas from the texts they read in IsiXhosa and English, respectively, when their performance is compared within and between the groups due to to the intervention.

1.4 Research questions

The study provides answers to the following questions:

What effects do translanguaging techniques have on teaching reading to IsiXhosa and English grade 4 bilingual learners with regards to the following:

i. the extent to which the learners are able to recall information in the texts they read in IsiXhosa and English?
ii. the learners' text reorganisation skills in IsiXhosa and English?
iii. the learners' ability to draw inferences from the texts they read in IsiXhosa and English?
iv. the learners' ability to make prediction on how the events would unfold in the texts they read in IsiXhosa and English?

1.5 Rationale

The study was prompted by the researcher's great concern about the Grade 4 learners' low reading abilities. The low reading abilities of the learners could be caused by the fact that Grade 4 learners are expected to read, comprehend, and respond to written texts critically (Makalela & Fakude, 2014), whereas little attempt is made to teach them the relevant skills to that effect in the preceding grades (see the Curriculum and Assessment Policy Statement (CAPS) for Foundation Phase Grades R to 3 in DBE, 2011a; Madiba, 2013). So far, there has been no attempt to determine whether using IsiXhosa and English, simultaneously, as an intervention programme for reading development could improve the learners' ability to comprehend texts in either or both languages. Research on the use of 2 languages simultaneously in one lesson is still limited. By conducting this study, it had been anticipated

that using 2 languages simultaneously in the same reading lesson would cross-pollinate comprehension skills across the two languages and improve reading abilities of the learners.

1.6 Definition of key terms

Annual national assessment (ANA) – assessments introduced by the Department of Basic Education (DBE) in South Africa in 2011 to enable a systemic evaluation of education performance at selected grades and learning areas, and thereby improve learner performance.

Inferencing – a reading comprehension skill in which a reader blends pieces of information from a text using the reader's background knowledge in order to arrive at a conclusion.

First Additional Language - the language chosen as medium of instruction from Grade 4 upward (English) at the participating schools.

Home Language – the language chosen as medium of instruction from Grade 1 to Grade 3, supposedly used at home for normal communication by most of the learners at the participating schools (IsiXhosa).

Information recall - a reader's ability to remember and provide accurate details about the text they read.

IsiXhosa – one of the 11 official languages spoken predominantly by Black people in the Eastern Cape and the Western Cape provinces in South Africa.

L1 – the language a speaker uses for everyday communication with parents and siblings at home.

L2 – an additional language learned, in most cases at school, besides L1.

Matthew effect - a principle which posits that if a learner fails to master the basic reading skills until grade 4, that learner is likely to have a hard time learning to read thereafter (Protopapas, et al., 2011).

One-Way ANOVA - analysis of variance (ANOVA) used to determine whether there are any statistically significant differences between the mean scores of three or more independent (unrelated) groups (Lund & Lund, 2018).

Text prediction – one of the reading comprehension skills in which a reader predicts how the events might unfold in the reading text.

Text reorganisation – a reading comprehension skill in which a reader writes a summary of the reading text to demonstrate their understanding of the text.

Translanguaging – a pedagogy in which two or more languages are used simultaneously to facilitate meaning.

T-test - an analysis of the mean scores of two groups or datasets to measure the variances of their distributions (Field, 2009).

1.7 Organisation of chapters

Chapter one presents a detailed background to the study. It stresses the need for a study of this nature. Highlighted here is, apparently, lack of research on the use of multilingual approaches to address a reading problem at elementary grades. It also provides the aim of the study and the definition of the key terms used in the study, the questions the study intended to address, as well as an outline of the research objectives the study sought to meet.

Chapter two identifies the theoretical framework and empirical research dealing with reading comprehension in more than one language. This chapter examines the relevance of existing hypotheses, which are the linguistic interdependence hypothesis and the threshold hypothesis, against the suggested simultaneous use of more than one language in a reading classroom - translanguaging. The chapter also covers literature that deals with reading and reading comprehension, information recall ability, text prediction ability, drawing inferences and text reorganisation strategies.

Chapter three explains how the data were collected and analysed for the study. It, briefly, provides the design used in the study. Furthermore, it provides details on how translanguaging intervention was implemented with special focus on teaching the participants how to make predictions before reading a text, draw inferences while reading, and be able to recall and summarise the text after reading it. Covered in this chapter are the following: population and sampling, the research design, data collection and analysis, ethical considerations as well as validity and reliability issue related to the study.

Chapter four presents the data obtained for each of the variables investigated in the study which are text recall abilities, drawing inferences, the ability to make predictions, and text reorganisation abilities. The details on the findings for each variable are presented.

Chapter five provides a summary of the study and the major findings. The significance of the study as well as its contribution to the scholarship of learning and teaching are also emphasized. Recommendations and the limitations that could be observed from the study are highlighted.

1.8 Conclusion

The proceeding chapter has introduced the study. It highlighted the background to the study and identified the gap in existing research. For instance, it has been provided that the potential of translanguaging technique in which two languages are used simultaneously in one lesson has not been fully exploited in the South African school setting regardless of the constitutional provision to do so, and the explicit desire to exploit the technique by teachers and learners. The chapter also provides the aim of the study, which sought to investigate the effects of translanguaging techniques on teaching and assessing reading comprehension using both IsiXhosa and English simultaneously in the same lesson. The rationale and the definition of key terms used in the study have been provided as well.

Chapter Two: Literature review

2.1 Introduction

This chapter presents the theoretical framework and empirical research dealing with reading comprehension in more than one language. It examines the relevance of existing hypotheses, the linguistic interdependence hypothesis and the threshold hypothesis, against the suggested simultaneous use of more than one language in a reading classroom. The relevance of some underpinning factors of these hypotheses are questioned by current developments in empirical studies on approaches to second language learning and teaching in multilingual settings, such as translanguaging. In addition, this chapter highlights the relevance of the New Literacy Studies (NLS) as one of the frameworks of this study. NSL views literacy not only as a technique (the ability to read and write), but as always embedded in socially constructed epistemological principles, embedded in a particular social context.

Presented here is also a literature overview of the five components of reading comprehension, namely: information recall ability, text reorganisation, text prediction, and the ability to draw inferences when reading texts. Comprehension is often considered to be the most complex literacy task that draws on the coordination of many different reading and cognitive skills (Peng, et al., 2017). The chapter attempts to reflect on the relevant underpinning factors that make translanguaging the most relevant pedagogy through which reading comprehension skills can be facilitated.

2.2 Theoretical Framework

2.2.1 Linguistic interdependence hypothesis

The linguistic interdependence hypothesis has been a bone of contention for quite some time, especially in the 1970s and 80s. It claims that the successful development of a second language (L2) at school depends on the language best known and used by learners upon entry to school - the learner's home language (L1). It suggests that L1 provides a base for L2 acquisition in that linguistic knowledge of L1 will aid in the learning process of L2 (Brisbois,

1995). According to Cummins (2005), L1 serves as an intervening variable in the development of cognitive and social skills in L2.

Several studies were conducted to test the validity of this hypothesis. Verhoeven (1991, in Cummins, 2005, p. 8) examined 2 groups of 138 grade 1 Turkish (L1) Dutch (L2) biliterate learners. One group of learners was involved in a Dutch only submersion curriculum, which provided L2 literacy instruction before L1 literacy instruction, and the other group followed an L1/L2 transitional curriculum, where literacy skills were first taught in Turkish, and then in Dutch. The submersion group showed a strong transfer from earlier acquired decoding and reading comprehension skills in L2 to later-acquired similar skills in L1, and the L1/L2 transition group also demonstrated a positive transfer of L1 literacy skills to similar skills in L2. This suggests that strong literacy skills in L1 lead to better literacy in both L1 and L2 and that bilingual instruction may not adversely affect development of either L1 or L2 academic abilities.

Jiang (2011) studied the contributions of L1 literacy and L2 proficiency to L2 reading comprehension among 246 first-semester non-English-major undergraduate students in China. The findings indicate that L2 proficiency was a significant predictor of L2 reading. He also argues that language interdependence hypothesis is likely to succeed in L2 readers with a solid educational background in L1 and who have developed sufficient L1 reading skills and strategies to apply these skills and strategies when reading in L2. It is, therefore, assumed that if learners' reading skills are well-developed in the language they are most proficient in, usually their L1, transfer to the L2 would normally follow (Prinsloo & Heugh, 2013). It is this view that informed the South African Language in Education Policy of 1997 (DoE, 1997) according to which it is expected that second language acquisition may be achieved through an additive approach to bilingualism, which view this and other research (see García, 2017) attempts to challenge. In South Africa, learners are taught in their home language from Grade 1 - 3, while English is taught as a subject; from Grade 4 upward, English is used as the medium of instruction while the Mother Tongue is maintained through being learned as a subject. Although the significance of Mother Tongue education is widely acknowledged and encouraged, English still plays a prominent role throughout one's education in South Africa. In so doing, not only posing a challenge to learners whose command in the language is not developed, but also arousing serious concerns about the role of indigenous African languages

in an African child's education. Research (Makalela, 2014; Hornberger & Link, 2012) shows that multilingual learners are stifled when they are confined to monolingual ways of acquiring knowledge the hypothesis of which include the linguistic interdependence.

Furthermore, Van Gelderen, et al. (2004, 2007) investigated reading comprehension development among a group of 389 adolescent Dutch (L1) and English (L2) students during a three-year span from Grades 8 through 10. The findings indicated that L1 reading comprehension skills correlated strongly with the L2's and that L1 contributes more to L2 reading comprehension than it is the other way around. Likewise, Cenoz and Gorter (2011) conducted a study among 15 year old trilingual Basque, Spanish and English speaking learners. The results indicated some crosslingual transfer of writing skills between the 3 languages.

One cannot downplay the contribution the linguistic interdependence theory has on second language acquisition. However, it should be noted that the hypothesis adopts a monoglossic approach to language development in that they treat languages separately - a skill must be obtained in one language first, and then transferred to another later. The common underlying proficiencies that aid reading ability across languages, which might allow a simultaneous development of reading in 2 languages at the same time, are not considered. Research (Makalela, 2014; Hornberger & Link, 2012) shows that multilingual learners are stifled by monolingual approaches to teaching and learning in multilingual classrooms.

2.2.2 Threshold hypothesis

Another hypothesis which the findings of this study seem to allude to is the threshold hypothesis (Cummins, 1976), also known as short circuit hypothesis (Clarke, 1980). According to this hypothesis, there is a point at or after which a learner should be able to demonstrate a given level of linguistic competence, whose ability will enable the learner to progress academically, while, on the other hand, failure to attain the expected level of performance at or after a particular level of education may cause some cognitive deficit, which may, in a long run retard academic performance of a learner. Cummins' threshold hypothesis is often marked by a point at or after which a learner has attained conversational fluency in the target language – often referred to as the Basic Interpersonal Skills (BICs) –

and the cognitive competency in which a learner is able to use the target language in various other social and academic contexts – often referred to as Cognitive Academic Language Proficiency (CALP). In the case of South African Grade 4 learners, who are at the stage where they are expected to be transitioning into English as the medium of instruction, more time is spent on English teaching (Makalela, 2012). The lurking disadvantage of this practice is that, if a learner attains below the desired level of competence in his L1, "… his interaction with the environment through the medium of that language, both in terms of input and output, is likely to be impoverished. Not only will he fail to comprehend much of the content of schooling but he is also likely to experience difficulty in expressing his developing intelligence and operating on the environment through his L2" (Cummins, 1976, p. 23).

Cummins (2005) identifies 2 types thresholds often considered in academic spheres: one of which is often marked by a point at or after which a learner has attained conversational fluency in the target language, the Basic Interpersonal Skills (BICs); and the other one being a cognitive competency level in which a learner is able to use the target language in various social and academic contexts, the Cognitive Academic Language Proficiency (CALP).

The threshold and related (e.g. the linguistic interdependence) hypotheses pave the way to this study to show the various factors underpinning the development of a second language. However, the hypotheses assume a monolingual approach to literacy development. For the transfer to take place, it is fundamentally presumed that the first language, should have been developed well enough and learners should have reached the threshold. The shortcoming of the threshold hypothesis is that the threshold that one has to reach requires the learner to have sufficient lexicosemantic and morphosyntactic knowledge of the target language for the transfer to be successful. It has been observed that in Grade 4, learners' competence in either or both languages remain below the threshold, which then affects their cognitive interaction with texts at this level and affects academic progress (DoE, 2014b). This research argues for a learning model in which both a home language and a target language, regardless of the level of proficiency, are naturally integrated into a complex dynamic bilingual repertoire in which translanguaging is both the supportive context and the communicative web.

2.2.3 New Literacy Studies

This study was also influenced by New Literacy Studies (NLS) which views literacy not only as a technique (the ability to read and write), but as always embedded in socially constructed epistemological principles, embedded in a particular context, and is implicated in relations of power and identity (Street, 2003). While NLS acknowledges reading and writing abilities as part of the concept, it however, posits that literacy derives from the social context which comprises knowledge, identity and being. New literacies provide for the means of knowledge generation, dissemination, and acquisition in the modern rapidly developing technologically advanced, multicultural, and multilingual global village. In other words, NLS requires that literacy acquisition and terminology be attuned to the continuously changing social, economic, political and technological developments in human life. Since technology and social life are continuously changing, due to *inter alia* human migration and technological advancements, new strategies and dispositions for making meaning should be developed. These include the use of digital media, the latest information communication tools (ICTs), and the incorporation of multilingual, multicultural, and multimodal approaches to literacy and development.

Linked to NLS is Vygosky's (1978) sociocultural approach to literacy, which suggests that each learner's performance at school is often shaped by broader social, cultural and historic trends in their community. It has been observed that an individual develops cognitively through internalisation – a process that comes in two folds: at social level and at the individual level, which Vygotsky also refers to as "*between* people (*interpsychological*), and then *inside* the child (*intrapsychological*)" (p. 57). Between people, an individual observes, learns and interacts with others, and in so doing, develops their consciousness. It is through this interpersonal interaction that the individual also develops intrapersonal consciousness, which tends to manifest itself inside-out in various ways. One's participation in community or cultural activities that involve reading can, possibly, enhance one's reading ability at school. Therefore, NLS adopts a sociocultural approach to literacy in which some out-of-school activities are investigated to ascertain how they shape one's reading ability in-school. Out-of-school activities refer to any events, practices, ideologies, discourses, and identities that are not prescribed by an academic institution nor limited to the institution's physical space or time. The out-of-school activities referred to herein also include what García, et al.

(2006) refers to as *pluriliteracies*. According to García, et al. (ibid), people engage in various literacy practices every day, which are often "…influenced by social, cultural, political, and economic factors, and use various complex social interactions" (p. 1). In this regard, one looks at how the learner's reading ability (or lack thereof) has been influenced by individuals, families, networks, communities, organizations, and institutions that do not form part of mainstream academic institutions. Hull and Schultz (2001) observe that research in this regard has "the potential for engaging students in high levels of reasoning about literary texts by drawing on their tacit knowledge of cultural forms found outside school" (p. 592). Therefore, reading ability can be harnessed if attempts to that effect are not confined to a physical space, which is a school.

Connections of relevant cultural and linguistic knowledge with print may enhance learners' ability to comprehend text and bring learners' own lived experience in the text. As mention elsewhere herein that learners experience school differently, research of this kind can help one understand and capitalise on out-of-school experience that seem to enhance in-school activities, and address as appropriately as possible any problem encountered by learners who feel alienated from school. Basically, in this instance, the researcher advocates for a democratic impulse of inclusiveness informed by the desire to understand personal circumstances that shape a learner's reading capabability, which calls for a broader examination of the life and learning in families and/or communities, and other activities a learner engages in out of school.

NLS calls for an examination of the relationships between school and non-school contexts. It has been realised that many multilingual learners fare poorly at schooling, and the reasons thereto are attribute to too much focus on classrooms, while ignoring a broader examination of life and learning in families, communities, and organizations. Thus, NLS challenges the traditional approaches to literacy development which come already loaded with ideological and policy presuppositions that do not fit current trends and broader literacy practices in various contexts. The current trends provide for common platforms, like social media, in which users or consumers are invited to actively participate in the creation of content. This has given rise to a participatory culture in which a consumer is not a passive recipient, but an active creator of knowledge who guides such creation to suit their needs in their specific context. This challenges the standard view in many fields, from schooling to development

programs, in which it is assumed that literacy in itself will have effects on the social and cognitive practices of the consumer (Street, 2003).

What is key in the modern social and digital age is coexistence in an open and shared space by all, regardless of status in society in which pluralism, multiculturalism, and simultaneity are the norm. The traditional ways of literacy development are characterised by tension between the learners' expectations and perceptions of what it is useful to know about the world and actual school literacy practices. NLS calls attention to the tendency to valorise out-of-school literacy practices and attempts to establish programmes that can put out-of-school literacy practices on equal footing with schooled knowledge. Such programs can serve a range of important functions, including helping us to reimagine classrooms and students, and could provide spaces for broadening learning opportunities and doing academics differently. However, the reimagined new order requires tolerance and unity while working toward productive diversity, in which people are valued in their difference, and expertise at work centres on the ability to engage and negotiate differences (Hull & Schultz, 2001).

NLS seeks to facilitate a link between literacy and identity, calling for attention to how particular identities can recruit or repel certain literacy practices (Hull & Schultz, 2001). It suggests new approaches to language and literacy that facilitate a link between schooling, which seems to produce falling literacy standards on the one hand (DoE, 2011a; 2012; 2013, 2014), and social contexts in which literacy events and practices seem to thrive, on the other. The new approaches should treat literacy development in social context as a resource rather than confining literacy to a set of rules formally and narrowly defined by governments and educational discourse. Literacy attained through schooling is always contested: learner compete against set norms and standards; and is always rooted in a particular dominant world-view which seeks to empower a selected few, and marginalize others.

NLS contributes meaningfully to the current debate about the contradictory views on literacy acquisition. Currently, there is a dichotomy between school-centric and socio-centric views to literacy development (Street, 2003). The in-school literacy practices are not reflective of the ways in which literacy is acquired and shared out-of-school, more especially in terms of language use, which is often confined to written form. Other modes which have proven useful in out-of-school contexts are being ignored while they may have been utilised as the

foundation for successful learning in school. A limited focus on the language of communication and instruction in school does not prepare learners for life after school, where they will be required to operate in more multimodal ways (Adoniou, et al., 2016). The effectiveness of literacy predominantly depends on language proficiency or the learners: their repertoire. The smaller the repertoire, on the one hand, the less efficient and effective the literacy practices; whereas, one the other hand, the more language resources there are, the broader and more communicative the literacy practices. Literacy is therefore a communication practice dependent upon language. The school-centric view, on the one hand, ignores the meaningful role a learner's social background plays to literacy acquisition and promotes the impact of schooling, the curriculum and pedagogy. On the other hand, the socio-centric view tends to attribute successful literacy acquisition at school to the facilitative role played by a home environment, and not solely to the school *per se*. NLS argues for a broadening and rethinking of school-based literacy (Hull & Schultz, 2001) rather than the restricted literacy development, acquisition of which is often confined to schooling, often administered in one language at a time, while the actual practice outside the school premises allows otherwise. A sociocultural lens can be applied to allow traditional and new literacies perspectives to coexist within one curriculum. However, due care ought to be exercised to enable a suitable pedagogical approach to ensure that there is coherence between the ways in which traditional and new literacies are taught. The approach should take into account the lived out-of-school experiences that have a positive impact on the learners' in-school experience. Literacy development should match current trends and aim at developing a working individual identity that involves a sense of self as a proficient user of multiple semiotic systems to generate and share knowledge. A fundamental goal of NLS is to support the growth of an individual to be as comfortable as possible with themselves in a given community, as well as being flexible enough to adjust and collaborate with others who might be different or hold a different view from theirs.

Reading ability has often been attributed to in-school activities, obscuring the fact that reading ability can also be a result of or enhanced by a convergence of various interactions amassed by an individual from out-of-school engagements. For instance, one might be interested to find out if there is any correlation between learners who use mobile technology quite often (like cell phones) and their reading proficiency, as the use of cell phones forms part of out-of-school activity – their everyday out-of-school sociotechnical practice. Further,

it will be very interesting to find out how various religious practices in various families influence their children's performance in reading. For example, in his quest to conceptualise the New Literacy Studies, Street (1984, 1995, Hull & Schultz, 2001) observed how various homes enhanced reading ability of their children through reading from, commenting on, discussing and interpreting the Quran. In a similar study by Hull and Schultz (2001) found that cognitive processes like memorization and verbal explanation could be improved through studying Quran, which was an out-of-school activity. In a nutshell, Scribner and Cole (ibid) demonstrated that certain out-of-school reading activities could foster particular specialized methods of thinking, while, in addition, García, et al. (2006) observe that various out-of-school literacy practices make learners gain diverse attitudes and beliefs regarding various literacy practices and how these are associated with particular learning situations. It has been observed that learners whose social background differs predominantly from that of school tend to perform badly in the school tests, meanwhile they perform successfully as members of their own communities. This, by implication, means that learners whose linguistic background differs from the prescribed language of communication at school are more likely to have a hard time at school than those who use a language similar to the ones prescribed at school. According to (Street, 1998),

> the reduction of the broad communicative repertoire of everyday life to the single strand of literacy by a narrow communicative focus in schooling may be an explanation for the problems with which the government is concerned, regarding falling standards and access doe those from non-standard backgrounds: the explanation does not so much lie at either the school end or the home end, but rather in the dynamic of the relationship between them (p. 3).

While literacy in social contexts thrives, government agencies and traditional schooling practices seem to stifle it in academic institutions. This indicates the need to reconceptualise literacy acquisition programmes to adopt literacy practices in various social contexts into traditional schooling practices.

2.2.4 Translanguaging

This study is framed within a translanguaging model. Translanguaging is a concept that came about in the 1920s because of the struggle against English hegemony in Wales, in which

Welsh was threatened, and to counter argue the fallacy that held that bilingualism caused mental confusion (Baker, et al., 2012). The concept is attributed to Cen Williams (García, et al., 2006; Baker, et al., 2012; Hornberger & Link, 2012), and refers to a pedagogical practice in a multilingual classroom in which a learner receives input in one language and gives output in a different language. Translanguaging is a spontaneous practice among multilinguals in which the interlocutors subconsciously switch the modes of input and output during the communication process. In other words, it is a process in which one receives a message in one mode of communication and, in return, interprets, actions or responds in another. Translanguaging has been broadened to include multiple discursive language practices (García, 2009) including technology (Vogel, et al., 2018) a multilingual person engages to make sense of the world and to formulate and express thoughts.

Various models through which translanguaging could be viewed and incorporated as a pedagogy have been suggested. These include Hornberger's continua of biliteracy (Hornberger & Link, 2012) and Makalela's Ubuntu Translanguaging (Makalela, 2016) models. The Continua of Biliteracy lens posits that learning occurs along and across continua. The lens provides the focal points in the continua at which one's knowledge and use of different language varieties and literacies meet. In a learning environment, biliteracy develops along reciprocal intersections between the various languages that exist in the learners' repertoire, and the various semiotic means by which they acquire and express the same. The continua enable one to see how possible it is for infinite, elusive, unpredictable, interrelated and simultaneous opportunities for literacy to develop within the continua, taking into account various contexts, content, linguistic and literacy repertoires that learners bring to the learning environment. Research has often assumed that literacy acquisition occurs in a linear and sequential way (Cummins, 2005), ignoring numerous possibilities of criss-crossing, backtracking, and simultaneity in the process. According to Hornberger and Link (2012) "the continua of biliteracy lens reminds educators that the more students' contexts of language and literacy use allow them to draw from across the whole of each and every continuum, the greater are the chances for their full language and literacy development and expression" (p. 243). At the centre of the continua of biliteracy are multilingualism as a resource, and translanguaging as a vehicle through which biliteracy can be achieved.

Makalela (2016) proposes a model in which an African value system of interdependence, ubuntu, is the framework for translanguaging. The model is introduced through a scenario about international trade and co-existence of numerous language groups in the Limpopo valley to show the notion of confluence between African multilingualism. It shows how confluent, fluid and porous languages have become and questions the relevance of the separatist orientation towards language education and literacy development in the 21st century. The ubuntu lens fits well as a pedagogical strategy in a multilingual context since, in an African context for example, one language is not enough to complete the cycle of meaning-making. This, therefore, explains why "the notion of translanguaging fits in to account for complex multilingual encounters where speakers use more than one language for exchange of input and output" (Makalela, 2016, p. 190).

The term translanguaging can easily be confused with code-mixing or code-switching (MacSwan, 2017). It is understandable though since translanguaging is a new concept, and is related to code-switching in a number of ways, among which is that the two disrupt the traditional isolation of languages in language teaching and learning (García & Lin, 2016). Code-switching, on the one hand, is understood to refer to switching or mixing languages - going back and forth from one language to another – by a speaker within a single utterance or conversation (García & Lin, 2016). In other words, the speaker switches between different languages. Translanguaging, on the other hand, posits that bilinguals have a single integrated linguistic repertoire from which they strategically draw appropriate features to communicate effectively. Code-switching differs from translanguaging in that the former assumes that the linguistic repertoire of a multilingual person comprises multiple separate language systems between which the speaker switches to express a thought. In code-switching, it is often assumed that each language possesses and preserves its own structure, autonomy, and separate identity (Lee & Canagarajah, 2018) There is usually a primary or host language and one or more guest languages between which the switching occurs. Therefore, the notion that code-switching is different from translanguaging is based predominantly on whether a multilingual individual has internally differentiated linguistic systems (MacSwan, 2017) or a single integrated linguistic system (Otheguy, et al., 2018). As a pedagogical approach, the teacher often code switches by switching from the prescribed official language of teaching to another language or the learners' home language and back again (Probyn, 2015). Code-switching often leaves teachers feeling guilty when they switch to 'illegitimate' languages in

contexts where monolingual expectations of language separation prevail (Fielding, 2016; Probyn, 2009). Unlike code-switching, translanguaging as a pedagogical approach is a result of deliberate alternation of languages of input and output between the teacher and the learners in order to optimise understanding. In essence, translanguaging may be regarded as a pedagogy that affords learners the opportunity to formulate and share ideas using a tapestry of vocabulary in their entire linguistic repertoire. It allows a space for multilingual language learners to apply different dimensions of their experiences and linguistic knowledge into one coordinated and meaningful performance.

Translanguaging might also be confused with translation (see, for instance, Caruso, 2018). Translanguaging differs from translation in that the former is proactive while the latter is reactive. In other words, translation entails reiterating what has been said albeit in a different language; whereas, translanguaging is a proactive process - a planned initiative that alternates the input:output languages. Unlike translation, translanguaging is intended not only to scaffold instruction and to make sense of the language of communication, but to allow multilinguals to optimally utilize their broad linguistic repertoire, and to function in the standardized academic languages required in schools (García & Sylvan, 2011). While translanguaging is the concurrent use of two languages, translation is more about language separation, scaffolding, and working mainly in the stronger language (Lewis, et al., 2012). In other words, as it is the case with code-switching, translation treats the translator's repertoire as comprising separate linguistic dialects while translanguaging treats the interlocutor's repertoire as one idiolect that is readily available to decipher or express thoughts.

As much as translanguaging and translation are different, there is some relationship between the two in that translanguaging includes translation. The two are similar in that they attempt to aid bilinguals to make sense and to actively participate in the communication process. However, one might be lost in translation and confusion might ensue when words are simply transposed from one language to the other. In her study, for instance, Caruso (2018) provides that the process of learning content using several languages may lead to confusion in terminology. The study involved a group of 15 postgraduate multilingual students from 4 different language backgrounds who were required to translate certain terms from their home languages into English. The participants were frustrated when they unsuccessfully attempted to translate some of the expressions into English due to the existence of multiple and finer

meanings of the expressions in their home languages. Therefore, translation does not always express thoughts as accurately as one might wish. Instead, translation can retard a conversation since it necessitates reiteration in a different language, while translanguaging carries the conversation forward in that there is no necessity to repeat in a different language as, in most instances, interlocutors understand each other's idiolects.

Translanguaging differs from theories of language acquisition in that it recognises the various linguistic varieties a learner has acquired as a single repertoire which a learner utilises to communicate. Unlike the linguistic interdependence hypothesis which claims that the successful development of a second language at school depends on L1-L2 transfer (Cummins, 2005), translanguaging advocates for the simultaneous use of the learners' tapestry of languages to acquire, construct and communicate knowledge. The linguistic hypothesis assumes a linear approach to language development – a skill has to be obtained in one language first and then transferred to another at a later stage. Furthermore, this hypothesis seems to engage a monoglossic approach to language acquisition in that it treats the languages in a learner's repertoire as separate and unrelated entities. In essence, this hypothesis does not appear to cater for common underlying proficiencies that aid abilities across languages, which might allow for simultaneous development in two or more languages.

Translanguaging is a spontaneous practice among multilinguals but, as a pedagogical approach, the practice deliberately switches the modes of input and output in a well-planned and organised manner to mediate information processing (Lewis, et al., 2012). It emphasizes the dynamic use of multiple means of expression to clearly express thoughts and, in a school environment, to enhance learning and make schools more welcoming environments for multilingual learners and communities. Contrarily, the current practice regarding the language of assessment requires a test taker to respond to the assessment instructions in a prescribed language of assessment. While learners can attempt to express their thoughts in the language, the prescribed use of a specified dialect tends to cloud the assessed abilities as multilingual test takers often have a hard time expressing themselves clearly when they are made to forgo their idiolect (DBE, 2011b). This hinders academic success of multilingual learners at elementary grades since they lack sufficient vocabulary to express thoughts. Translanguaging promotes a literacy acquisition process in which all languages are understood to be resources that can be accessed and invoked strategically to accelerate the

acquisition process and encourage maximum participation on the part of the learners (Hopewell, 2011).

In a classroom, translanguaging is a teacher planned alternation of receptive and productive modes of communication aimed at enhancing learners' cognitive and comprehension skills (Baker, et al., 2012). However, translanguaging can also be learner driven in instances where learners work independent of the teacher. For instance, when working together in a group, they often use their home languages and other means of meaning-making relevant to them as peers. Translanguaging, in this regard, becomes the process by which a multilingual learner accesses and utilises the lexicosemantic knowledge from the tapestry of languages in their repertoire to formulate and clearly express a thought. Therefore, translanguaging aids meaning-making in class by providing room for two or more languages to be utilised in a dynamic and functionally integrated manner.

Translanguaging also enables learners to overcome the 'home language' fallacy. While various education systems in multilingual communities assume that learners can speak or, at the least understand, the language offered as a home language when they start their first grade, research shows that learners in many countries speak a different language at home from the one they are taught and tested in at school. In their study in which they sought to examine a mismatch between teaching practices and the provisions of educational policy in a multilingual primary school in Khayelitsha, Krause and Prinsloo (2016) observe that the IsiXhosa that is spoken by learners at home differs considerably from the standard IsiXhosa home language the learners are taught and tested in at school. Thus, translanguaging provides for effective communication between speakers of allegedly different but intelligibly inexclusive languages in which the focus will be on meaning-making between the interlocutors instead of the diminutive discrete features of their languages. In this regard, translanguaging also enables the would-be disadvantaged learners to learn the school language and catch up quicker with regards to the school culture from their peers.

When reading, translanguaging strikes a balance between the learners' language needs and content learning in that the learners are allowed to utilise the variety of languages at their disposal to interact with texts so that they can easily recall what they read and re-tell it in a different language. For instance, one can read a text in one language and re-tell or explain it

in another. In so doing, one gets to see if they have understood the text. Thus, a reader utilises the translanguaging space to reflect on their reading experiences and linguistic knowledge, which transforms the reading process into a meaningful reader-text interaction and a lived experience (Li Wei & García, 2016).

Henderson and Palmer (2015) observed 2 grade 3 teachers' teaching practices - one taught in English only, while the other was expected to teach in Spanish only but taught the same group of learners using a hybrid of English/Spanish. The school had adopted the Gómez and Gómez (Gómez & Gómez, 1999) dual language model according to which each subject was taught in a particular language. For instance, math was taught in English, while science and social studies were instructed in Spanish. The findings exhibited that the learners' use of a hybridised English/Spanish in their communities outside school posed a serious challenge to the school monolingual norms and attempts to discourage the learners from mixing the languages. In addition, the teachers expressed frustration at the strict language separation model and felt torn between delivering content in the language best understood by the learners - a hybrid of Spanish and English - and at the same time show allegiance to the school policy. This suggests that drawing from various features of one's linguistic arsenal is a natural phenomenon which cannot be suppressed; but should be exploited in the classroom.

In Wales, translanguaging techniques were introduced in education to open up the possibility of two languages being seen as mutually advantageous in a bilingual school, person, and society (Baker, et al., 2012). In South Africa, however, the effects of translanguaging techniques have not been fully explored despite the multilingual nature of schools and the legislative directive that learning opportunities must, whenever it is possible, be made available in all the official languages (Constitution, 1996). Plüddemann (2011) observes that it is impossible to teach maths or sciences effectively to a multilingual classroom without shuttling (or allowing the learners to do so) between various linguistic repertoires in the classroom. This indicates a deficit in the educational system in that it deprives the learners of fulfilling their potential as multilingual citizens. The challenge that is faced by teachers in this regard is that translanguaging has not been sanctioned by education authorities, or by teachers themselves; instead, is generally regarded as a deficit practice mistaken for translation and code-switching (Probyn, 2015).

The fact that translanguaging is currently not freely and fully actioned has proven to be a challenge for learners as well. For instance, in his research, in which he investigated how the multi-ethnic and multicultural youth of Johannesburg, South Africa, negotiate their identities through languaging experiences, Makalela (2014) observes that "...children tend to experience an identity crisis in monoglossic school environments when they are deprived of opportunities to use their multiple discursive language forms, varieties and modes they bring with them." They feel like "being torn between school language expectations and out-of-school language experiences" (p. 677). Furthermore, learners at elementary grades cannot express themeselves in English, but can easily do so in their home language/s. Faced with this challenge, teachers have been found to have been 'smuggling' the vernacular into the classroom (Probyn, 2009) to aid their teaching. According to Mbirimi-Hungwe (2016), when a learner can explain what they have been reading in a different language from the one the text is written in, that shows that they have understood the text. Therefore, the learners should be allowed to express themselves in their home language/s to exhibit how well they understand what they read.

To the naysayers who fear that the simultaneous use of languages might cause a stunted development in a weaker language (Cenoz & Gorter, 2017), it should be noted that the interplay between the input:output languages should be well-planned and well-executed to enhance comprehension and to enable the ease of expressing thoughts in a weaker language. In so doing, due attention is paid to the weaker language to enable learners to receive instructions and respond adequately in that particular language as well.

As reflected above, research suggests that considerable positive outcomes can be achieved if the current approaches to reading development of bilingual learners could be reviewed. Translanguaging is one model that can help multilingual learners understand better in class, and at the same time restore the dignity of indigenous African languages in the classroom. Therefore, translanguaging should not be seen only as a language practice of multilinguals, but as a pedagogical strategy to foster language and literacy development (Hornberger & Link, 2012). As a conceptual framework, translanguaging and related ideas promote a positive view of bilingualism, permitting bilinguals to act naturally, using their languages as they do at home and in their communities (MacSwan, 2017). As a concept and a framework within which a study may be slotted, translanguaging is quite a recent concept whose

theoretical underpinnings and research are still developing. Thus, so far, there is paucity of research on the effects of a translanguaging approach on reading in elementary grades in South Africa.

2.3 Literature review

2.3.1 Reading: approaches and models for reading development

Reading empowers one to meet their most vital needs and enhances meaningful participation in social, cultural, political, and economical domains of postmodern communities. In the past, reading research has been dominated by a bottom-up model of reading development (Bobrow & Norman, 1975). According to this model, the physical properties of a written or read stimulus are received by sensory registers, eyes for the sense of sight and ears for the sense of hearing. Information is then passed through the short-term (or working memory) for memorisation in the long-term memory (Schunk, 2012). Kimmel and MacGinitie (1981) observe that the bottom-up model advocates for a series of discrete processing stages, which proceeds from the most primitive level to the most complex level, letters.

Basically, it is asserted that reading develops synthetically: "learners build words up through sounding them out, one grapheme at a time" (Dombey, 2009, p. 2). Each letter is identified, and then a string of letters are grouped into clusters to form a word, strings which are parsed into phrases. Accordingly, reading consists of piecing together graphemes to form words, and words to form sentences, and sentences to form paragraphs (Parry, 1996). Letter recognition process becomes a prerequisite for the supposedly more demanding word identification and comprehension functions. Thus, higher level reading processes depend on the complete development of the lower ones, which are letter and word recognition. It is also claimed that if the lower level reading processes have not been well developed, it may be hard to rectify any errors accrued therefrom once an individual has reached a higher level. Therefore, for higher order processing (top-down skills) to operate optimally the lower-level (bottom-up) processing skills must be built first. The ability to recognise letters and words and to automatically make the phoneme-grapheme connections, commonly known as decoding, is a critical, bottom-up skill in reading development and is of vital importance in successful reading comprehension. In other words, the bottom-up model asserts that reading development is unidirectional and hierarchical, with one stage of reading development leading to the next, which ultimately produces a semantic interpretation of a sentence.

Readers learning to read, typically, use bottom-up processing to decipher letters and new words and are made to sound them out. It is also claimed that readers in general also rely on bottom-up processing when experiencing unfamiliar words in a text (Schunk, 2012).

The downside of the bottom-up approach to reading development is that input is transformed from low-level sensory information into word or sentence level through a series of successive levels of encoding, with information flow that is assumed to be entirely text-based. This model can be challenged because it fails to provide for cognitive and semantic context effects. For instance, this model provides no compensatory mechanism or explanation for instances where, under certain circumstances, poorer readers (text decoders) show a greater performance on higher-level (such as comprehension) of the reading processes (Stanovich, 1980). Furthermore, the bottom-up approach is based on several assumptions that are arguably based on studies on monolingual subjects and cases in which subjects had to read one grapheme or phoneme for one language at a time, an instance which is not workable in a multilingual South Africa. This model is also refuted because it assumes that graphic input is precisely and sequentially recoded as phonological input and then decoded bit by bit; and that meaning is cumulative, that is, it is built up one piece at a time (Goodman & Goodman, 1976). Essentially, this model of reading development is suitable for homogeneous monolingual settings in which reading development is viewed as unidirectional and hierarchical, with one stage of reading development, in one language, leading to the next, which ultimately produces a semantic interpretation of a sentence.

The bottom up approach to reading and reading development dominated reading instruction until it was challenged by, among others, Goodman (1976) and Smith (1982). In contrast to a code-emphasis and text-driven bottom-up model, reading is perceived, chiefly as an externally guided top-down model of the reading process (Batista, 2014). Goodman (1976) argues, for instance, that readers read texts with expectations of what those texts will be about, based on their knowledge of text structures and of the world. As a top-down model, reading development allows learners to acquire the reading skills that will help them read to learn, by applying appropriate knowledge (or schemata) to interpret written texts. Accoding to Goodman (1976), reading is a psycholinguistic guessing game in which a reader selectively processes new information using knowledge of available language cues to arrive at a decision. A reader brings to the reading process his experience, knowledge of the

language and thought development, which aids his ability to anticipate that which has not been stated in the reading - the reader's expectation. He highlights how a novice reader's guessing miscues suggest how the reader executes the psycholinguistic guessing game in reading, which he argues "points to a selective, tentative, anticipatory process" (Goodman & Goodman, 1976, p. 107). In his quest to support his model of reading as a psycholinguistic guessing game, Goodman (ibid) found, inter alia, that a reader may mispronounce or substitute a certain word while they clearly know its meaning or its semantic association. Since meaning is central to reading, a reader may name the words in a text anything, for as long as it makes sense to the reader and is grammatically acceptable. In this regard, a reader seems to be playing a game of name the word.

Contextual clues play a prominent role in the top-down reading model. When a reading event occurs, information processing in the knowledge centre gets activated and the reader searches for clues from their general knowledge of the world, vocabulary, discourse structure or logic, and may then make calculated guesses regarding the text they are reading. In other words, a reader develops expectations regarding perception presented in a written text based on the context. The effectiveness of the top-down processing depends on extensive prior knowledge (Schunk, 2012).

The shortcoming of the top-down approach to reading development is that it is more suitable for advanced readers and learners learning in their native language, a scenario that does not suit the South African context in which there is plurality of cultures in one community, school and classroom, which often causes many learners to learn in a language that is not their mother-tongue. The other disadvantage is that this model assumes that meaning making is solely dependent on the reader's knowledge: the bottom-up processing skills are condemned.

The dichotomy between the bottom-up and the top-down approaches led to some contemplation of an intermediary model, according to which reading was viewed as a complex interactive process in which both the data driven cognitive processes were said to play an important part in a person's reading and reading development. It was conceded that information acquired through the bottom-up processes like senses, for example by observing, listening, tasting, smelling, or touching, constitutes raw materials rather than ideas. The

reading process, then, brings into awareness knowledge or ideas, through reflection – recalling what exists in the mind – as a result of incoming sensory information (Schunk, 2012).

The interaction between the bottom-up and the top-down occurs in that when the sensory registers recognize a stimulus feature, it is transferred to the working memory in which, when recognised, it will be confirmed and may be transferred to the long-term memory or, when not recognised (if it's new information for instance), will be disconfirmed. When a stimulus feature has been disconfirmed, the bottom-up processing takes place in which the stimulus feature will be memorised and becomes a recognisable feature in the reader's repertoire (Schunk, 2012; McIntyre, et al., 2011). In other words, a reader makes predictions about the meaning of a text based on her top-down skills, which may include knowledge of vocabulary, discourse structures, and the world. The reader then refers to her bottom-up skills, which may be phonological awareness, letter knowledge, phoneme-grapheme relationships and fluency, to check the text in order to refute or confirm or modify those meaning predictions. This model, therefore, serves as the middle ground between the bottom-up and the top-down models.

From an interactive approach, reading is viewed as a cognitive process in that it depends on one of the fundamental features in the reading process: comprehension; it involves a comprehensive amount of cognitive processing, which includes inferring, integrating and evaluating a text for any inconsistencies and loose-ends (Pretorius, 2000). As a bottom-up process, on the one hand, comprehension can be explained as the broader understanding of the text as a whole, which commences with a simple process whereby meaning is constructed within and between sentences, and across larger units of text. As a top-down approach, on the other hand, not only does comprehension depend on the meaning provided in the text: a reader also cosntructs meaning to the text based on their experience from socio- and cultural interactions with the external world. In order to comprehend written texts, a reader applies an intermediary approach comprising features adopted from both the bottom-up and the top-down models. The decoding process helps learners learn to read, while comprehension helps them read to learn and, in so doing, fulfil the purpose of reading a particular text. Without comprehension, reading cannot fulfil any purpose for which it is meant or hoped.

As preferrable as this model may seem, the status quo in the South African education system does not seem to have adopted, fully, the tenets of this model. As explained in details below, reading at elementary grades does not seem to engage a fair amount of cognitive processing, which includes inferring, predicting, integrating and evaluating written texts. Studies (Pretorius, 2000; Manyike, 2012; Makalela, 2012; Makalela & Fakude, 2014) show that learners in lower grades often decode print information without any comprehension whatsoever. In their study in which they sought to assess oral reading fluency trajectories among Grade 4-7 learners' home language, Sepedi, Makalela and Fakude (2014) found that the learners lacked automated phonological-orthographic mapping, which, they argue, "…is a strong indicator that the readers' overall reading competence is weak" (p. 6). The lack of automaticity may be due to limited opportunities for learners to interact with texts due to limited time allocated to comprehensive reading, and lack of print material to read from, to which Prinsloo and Heugh (2013), refer as one of the items that needs to be addressed in a nation-wide literacy strategy, suggest placing books in learners' hands every day in class and to take home to read. Even if the learner were to have books in their hands, there is no guarantee that they would be able to read – to comprehend at the expected level. Merely reading a lot, without proper instruction on reading comprehension, does not make for better reading (McIntyre, et al., 2011).

One of the models around which oral reading proficiency and comprehension has been conceptualised as an indicator of overall reading competence is the automaticity model. Automaticity can simply be explained to be that which, after repeated practice and deeply ingrained habits, one performs with great ease, little effort and little conscious thought. In reading, for instance, skilled readers read words without much awareness of the processing involved in doing so, whereas novice readers may be painfully aware of the steps, and may be slower and careful when executing them with considerable effort. Proponents of this model, LaBerge and Samuels (1974), argue that in reading, the rate at which automaticity occurs is limited by the fact that letter encoding has to be automatized before word reading can be automatized. The reader decodes as he recodes the coded graphic input, and encode the meaningful oral output (Goodman & Goodman, 1976). It is worth noting that the interaction between decoding and comprehension processes occurs rapidly and simultaneously.

One factor, amongst others, that has been identified which is deemed to contribute significantly to automaticity is the amount of consistent practice in consistent environments (Logan, 1997). Through repeated practice, the next level of the reading process is unitisation, according to which words that had initially been seen as separate entities are seen as a unit. Therefore, as Logan puts it, "reading involves several different levels of processing, from letter recognition to the apprehension of subtle aspects of meaning, and single-trial automatization makes it possible for automaticity to appear at every level. The main requirement is that the reader encodes the relevant structures in memory (e.g., letters, words, propositions, ideas) and retrieves them when they are encountered once again" (Ibid, p. 134).

In their contention, in which they observe that reading is a guessing game, Goodman and Goodman (1976) state that what seems to be spontaneous in any guessing is basically "the result of knowledge so well learned that the process of its application requires little conscious effort" – the automatic intuitive level. The problem with learners in South Africa is that, once they have been taught to decode, further information processing skills tend to be taken for granted despite the fact that learners need to be assisted in order to develop meaningful comprehension skills (Pretorius, 2000). According to Vygotsky's (1978) zone of proximal development, there are certain difficult tasks that a learner can perform without much assistance, if at all, from a teacher; there are some tasks, however, in which the learner needs support, and reading and acquiring comprehension skills are the ones. It is, therefore, through the instruction from teachers, adults and more skilled peers that children learn to read and develop comprehension skills (Vogler, et al.).

In their study in which they sought to assess oral reading fluency trajectories among Grade 4-7 learners' home language, Sepedi, Makalela and Fakude (2014) found that the learners lacked automated phonological-orthographic mapping, which, they argue, "…is a strong indicator that the readers' overall reading competence is weak in their home language" (Makalela & Fakude, 2014, p. 6). The lack of automaticity may be due to limited opportunities for learners to interact with texts in their home language because of limited time allocated to reading in home language, and lack of print material to read from, to which Prinsloo and Heugh (2013), as one of the items that needs to be addressed in a nation-wide literacy strategy, suggest placing books in learners' hands every day in class and to take home to read. As most of the learners had never interacted with any reading material before their

first grade, they need to get greater exposure to print as this will afford them opportunities to read and, in effect, build up new knowledge structure, and enhance their information processing skill, which is required for academic success (Pretorius, 2000).

Even though one may improve one's language acquisition through reading, a reading skill is more an academic literacy skill than anything else. Madiba (2013) identifies a few attributes of skills that can be classified as academic, and these fit reading quite well. He observes that academic skills need to be generic, should be transferrable across languages, and should constitute foundational skills that are required for the performance of academic tasks irrespective of the language in which those tasks are presented (Madiba, 2013). Therefore, this study investigated the effects of the translanguaging techniques on reading as an academic skill, not as a language learning skill *per se*.

2.3.2 Reading comprehension

Comprehension remains one of the issues that needs to be addressed when dealing with reading and writing, literacy and language acquisition in general. Comprehension, as Pretorius (2000) puts it, "…is the *sine qua non* of reading" (p. 34). Without it, reading cannot fulfil any purpose for which it is meant or hoped. While the decoding process helps learners learn to read, comprehension helps them read to learn, and in so doing, fulfil their purpose of reading a particular text. Comprehension is considered one of the crucial skills upon which success in academic programmes depends. In order to read successfully, one needs to acquire appropriate reading skills and strategies, and appropriate comprehension skills and strategies.

Although the two terms, skill and strategy, may be used interchangeably in some instances, there is a fundamental difference between the two. A skill refers to one's ability to perform certain procedures in the same way every time without much conscious thought and effort, whereas a strategy is well thought out and adaptable plan regarding the execution of a particular procedure. The same skill may be applied effectively in the same manner in similar or related contexts almost all the time, while a strategy might need to be adjusted to suit the needs of a particular context. The two terms are inextricably interwoven in that they deal with the procedural knowledge applicable in different ways and in varying conditions and contexts. It is worth noting that comprehension strategies is not an easy skill to teach and

cannot be taught by drill. It calls for the coordination of individual strategies, which involves altering, adjusting, modifying, testing, and shifting tactics as is fitting, until a reading comprehension problem is solved (Roit, 2016).

When it comes to reading, comprehension plays a pivotal role in that it helps a reader decipher and respond appropriately to a written code. However, one may wonder if there are any techniques that teachers apply to help learners approach texts in ways that promote comprehension. Previous research (Duke & Pearson, 2002; Zimmerman, 2014; Block & Duffy, 2008; Roit, 2016) suggests a few essential components that ought to be considered when developing, hopefully, a successful reading comprehension strategy. These include the use of prior knowledge; asking relevant questions before, during and after reading a text; visualising and drawing inferences from the text; making plausible predictions on how the events might unfold in the text; and, determining what is important when retelling or summarising the text, to mention a few. Therefore, reading comprehension can be defined as a strategic process during which a reader is constantly constructing and reconstructing meaning using a variety of strategies, such as activating background knowledge, monitoring and clarifying, making predictions, drawing inferences, asking questions and summarizing (Roit, 2016).

Research (Schunk, 2012) suggests numerous ways in which reading comprehension strategies may be taught. For instance, one of the ways in which the strategies can be inculcated may be through reciprocal teaching. Reciprocal teaching involves a dialogic interaction between a teacher and a group of students in which the teacher models the reading activities, after which learners take turns remodelling what the teacher did. Therefore, reciprocal teaching comprises social interaction and scaffolding as students gradually develop skills. Reciprocal teaching is commended for greater comprehension gains and improvements in the quality of summaries (Schunk, 2012). For the process to unfold smoothly, it is recommended that the teacher should explain clearly so that it can be easy for the learners to understand and model.

Another way in which reading comprehension can be taught is through think-alouds. Think-alouds comprise teacher modelling in which the teacher vocalises his/her thinking, thus letting the learner know what s/he is thinking and how s/he is thinking about it. Thinking aloud makes teaching metacognitive: it helps learners think about their thinking, and thus

monitor their comprehension. (McIntyre, et al., 2011). Texts that are light in terms vocabulary and background knowledge demands are preferable when introducing comprehension strategies.

In essence, for reading to be effective, there ought to be a symbiotic interplay between comprehension skills and comprehension strategies. Teachers should help learners acquire the necessary reading comprehension skills, and then provide the suitable reading comprehension strategies to enable the learners to apply the suitable skills in appropriate situations. Research, however, shows that learners in grade 4 cannot decode print information; thus, cannot make sense of written words. For reading comprehension strategies to be effective, the text and the reader's knowledge of the word, the world and the language ought to match. However, when learners have no basic decoding skills, it may be impossible to inculcate reading comprehension skills like predicting, inferencing, and summarising. Comprehension is blocked from the word go by the reader's lack of the requisite basic decoding skills before other reading comprehension strategies like the use relevant background, and pragmatic knowledge even come to the fore. Thus, without the word recognition abilities, like phonemic aware and decoding, it is unlikely that a learner can comprehend texts. Learners who understand how words are made up by putting together different sounds when they start school are in a good position to do well in the alphabetic system. They start reading independently more quickly and, through more opportunities to practice, develop automaticity and meaningful reading. In order to apply reading comprehension strategies, certain basic reading processes must be automatized to free up resources for more demanding higher level processes. According to O'Reilly and Sheehan (2009), when basic reading skills are lacking, learner might have a hard time drawing valuable resources from the higher level processes to deal with tasks that demand them. Any attempts by a teacher to teach further reading comprehension strategies can lead to the Matthew effect, a principle which posits that learners who fail to master the basic reading skills until grade 4, are likely to have a hard time learning to read thereafter (Protopapas, et al., 2011). Instead, such learners will read less and less, and get worse in their reading ability while those who thrive get better and better, thus widening the gap between the 'able' and the 'unable'. The concept derives its origin from the Bible, in which it is provided: "Whoever has, will be given more, and they will have an abundance. Whoever does not have, even what they have will be taken from them" (Matthew 13:12 & 25:29). In their research, in which

they sought to evaluate the presence of Matthew effects in reading comprehension for Greek elementary school students, Protopapas and his colleagues (2011) observe that for the Matthew effect to be present, there must be divergent trajectories of growth in the development of reading comprehension between low and high ability students in the context of a stable rank ordering of individual student performance. The Matthew effect occurs on the one hand as a result of the poor performing learners getting more and more demotivated due to their inability to comprehend texts while the difficulty of the texts they are expected to read is mounting, whereas on the other hand, those with better reading skills enjoy reading and are gaining even more therefrom. Therefore, without adequate foundation, the significance of teaching further reading comprehension skills becomes inconsequential.

While instruction in comprehension can help students understand what they read, remember what they read, and communicate with others about what they read, there is no available clear evidence that comprehension skills are taught in schools. Numerous annual national assessment reports, for instance, indicate that learners reach Grade 4 without the requisites reading comprehension skills, and that teaching some of the comprehension skills (e.g. drawing inferences) is not an easy task for teachers (DoE, 2014a; 2013). The policy document that provides for teaching reading, the National Curriculum and Assessment Policy Statement (CAPS) document (DoE, 2011a) is silent on how comprehension skills can be inculcated. Thus, teachers do not teach comprehension skills *per se*; instead, they merely assess if the learners could 'follow' the text by asking them to answer text-based language questions, vocabulary quizzes and by asking the learners what they recalled or interpreted from the text. In order to inculcate comprehension skill, the teachers should not be the ones asking questions; the learners should, instead. It is when the learners ask themselves questions while and about reading that they get to know if they understand. When readers ask questions as they read, they make inferences, monitor their own understanding, and attend to the structure of the text (McIntyre, et al., 2011).

2.3.3 Reading comprehension strategies

Discussed below is a review of 4 reading comprehension strategies that form the subject of this study; namely: information recall ability, text prediction, drawing inferences, and text reorganisation ability.

2.3.3.1 Information recall ability

Reading comprehension involves a fair amount of cognitive abilities which include recalling information and making predictions when reading a text. It involves being selective – paying adequate attention to the most important and relevant parts of the reading text. It also comprises going beyond the literal meaning of text by filtering and testing the quality of what one reads against their prior knowledge. By filtering and testing the quality, a reader can determine important information that is worth remembering. Determining the main idea is primarily a matter of using cues the author provides in the text to aid the reader predict what is most important (Block & Duffy, 2008).

There is paucity of studies that attempted to establish any relationship between bilingual reading techniques and text recall. Research often links reading and recall abilities to psycholinguistics and neuroscience (Goodman & Goodman, 1976) and working memory (Peng, et al., 2017), and the role the two play in content retrieval and processing. According to Strauss and colleagues (2009), the reader anticipates what the next word will be, using information from the reading text and pre-existing knowledge and, therefore, does not have to see each letter of the word or each word in a sentence when reading a text. In other words, experience tells the reader about the type of anticipated information, what it should look like and where to look for it. As they read, the reader selects evidence to confirm or disconfirm the predictions.

Just and Carpenter (1992) observe that working memory plays a pivotal role in reading comprehension as it entails the storing of perceived words and their integration into the reader's ideas, thereby generating the reader's intermediate or final thought. Alptekin and Ercetin (2011) examined the effects of working memory capacity and content familiarity on literal and inferential comprehension in second language reading. The results revealed independent and additive effects of working memory capacity and content familiarity on inferential comprehension. Thus, the readers' pre-existing knowledge related to the text content plays a pivotal role. Prior knowledge helps readers compensate for gaps in text-based information by affording quick and relatively effortless access to relevant information in long-term memory based on incomplete text-based information as cues. In order to recall information obtained from a text a reader relies on salient textual information and

background knowledge. Thus, reading involves deciphering a written linguistic code, meanwhile a reader also brings meaning to the text in order to make more sense out of it. Making sense of a text, requires a reader to relate the meanings of the text to what the reader already knows (Janks, 2011). Therefore, working memory helps a reader relate multiple ideas and concepts in their existing knowledge and those appearing in various parts of the text through inferential processes.

Noteworthy is the fact that reading comprehension involves more than simply recalling and retelling information. It is advisable that teachers teach learners comprehension strategies that will aid the learners to go beyond the surface of the text. Even if children can retell a story completely or list facts from a text, they may not have deeply comprehended the text if they are not able to discuss it (McIntyre, et al., 2011).

2.3.3.2 Text prediction ability

Previous studies show that getting students to engage in prediction behaviours increases interest in and comprehension of a text to be read (Duke & Pearson, 2004; Block & Duffy, 2008). However, due diligence should be exercised when making predictions about a reading text since each text is unique, and, thus, calls for specific prior knowledge. Making predictions should involve forming hypotheses about what will happen next, or what ideas the text will advance, continuous evaluation of these predictions and hypotheses and revising them as the reading warrants (Roit, 2016). The process involves the use of relevant existing knowledge on the topic. The knowledge facilitates understandings of the ideas as the reader interacts with the text. Teachers should explicitly demonstrate how a reader can make prediction before and as they read a narrative or expository text.

Duke and Pearson (2004) provide some of the practical examples of what a should do to enhance text prediction skills of learners. They suggest that before reading a story, students should be encouraged to generate expectations about what the characters might do based on their (the reader's) own experiences in similar situations. The results exhibited better comprehension of the stories and enhanced reading performance for the previously less able readers on new stories such that learners could, after prediction, read without any teacher support. In essence, studies suggest that encouraging learners to engage their knowledge and

experience prior to reading can be productive in various ways. For instance, a reader brings to the reading process his experience, knowledge of the language and thought development, which aids his ability to anticipate that which has not been stated in the reading - the reader's expectation. This observation concurs with Goodman's (Goodman & Goodman, 1976) view about reading, according to which reading is viewed as a psycholinguistic guessing game in which a reader selectively processes new information using knowledge of available language cues to arrive at a decision. In this manner, reading becomes an interactive meaning-making process between the reader and the text in which a reader, as Block and Duffy (2008) put it, "proactively search for meaning as they read, using text cues and their background knowledge in combination to generate predictions, to monitor those predictions, to repredict when necessary, and generally to construct a representation of the author's meaning" (p. 21).

What happens prior to actual reading is as important as what happens during reading (McIntyre, et al., 2011). For instance, providing the learners with the objectives before they read a text helps them comprehend texts better. Furthermore, whetting their curiosity about text by activating their prior knowledge rather than simply assessing comprehension retrospectively can also enhance their comprehension. Prior knowledge can be activated through discussion and other activities before reading. The activities can include asking the learners inferential questions that will aid them to predict what the text will be about.

In additin to discussions and activities suggest in the preceding paragraph, McIntyre et al (2011) suggests two more ways in which a teacher can enhance the learners' ability to make predictions when reading texts: using the anticipation guide, and 'take a picture walk'. With regard to 'take a picture walk' McIntyre suggests that before reading, a teacher can allow time for the learners to view the pictures and illustration in the text, and then make precdictions based on what they see. The teacher can also use an anticipation guide, in which the learners can indicate whether statements that make predictions about the text to be read are true or false. This can be taken as a true-false quiz before, during and after reading. As the learners read the text they can check their answers, and change them accordingly as the reading progresses.

Encouraging learners to make predictions when reading texts fosters comprehension, keeps the reader actively engaged and improves reading ability. It also allows the reader to go

beyond the text and construct a richer understanding of the reading text (Allbritton, 2004). Therefore reading comprehension is a fluid interactive process in which a reader obtains information from the text, makes predictions on how the events might unfold, monitors their predictions, and then repredicting in a continuous cycle. To comprehend, the reader must use the text cues at their disposal to predict, monitor their prediction as they continue reading the text, and revisit their predictions to check for accuracy. For prediction to be successful as a comprehension strategy, the reader ought to know how to predict, monitor and revise their predictions in due time and due parts in their reading. The entire strategic process must be in place for comprehension to occur (Block & Duffy, 2008). Nonetheless, research on reading and making predictions focused predominantly on the effects of the exercise in monolingual contexts. So far, there is paucity of research on the effects of a reading development strategies in which learners are encouraged to read a text and express their predictions on how the events might unfold in the text in a different language from the one the text is written in.

2.3.3.3 Drawing inferences

Inferencing, in simple terms, can be defined as reading between the lines. In other words, it occurs when a reader blends pieces of information from a text with the reader's background knowledge in order to arrive at a conclusion. The ability to draw inferences helps a reader understand complex and subtle implicit messages conveyed through the choice of a particular vocabulary by the writer (Kispal, 2008).

Currently, there is no consensus regarding a suitable pedagogy that seeks to address how to teach inferencing skills. Research on teaching inferencing skills tend to embed this skill into teaching comprehension skills generally, which clouds the significance of teaching inferencing as a distinct skill that aids comprehension. Nonetheless, Kispal (2008) mentions 3 components that ought to be addressed when teaching inferencing skills, which are: lexical training, which focuses on the function and meaning of certain individual words in a text; question generation, in which learners are asked questions that would require them to make inferences and obtain supporting evidence from the text; and, lastly, prediction, in which learners use contextual clues to provide pieces of information that are missing from a text.

Narrative texts have been found to be more conducive when teaching inferencing skills at elementary levels than expository because they elicit more interest, prompt more explanations and predictions. Therefore, learners should be aware of the different text types, and their various structures. When learners are explicitly taught these differences, they comprehend each type of text quicker and better. For instance, McIntyre, et al., (n.d.) observe that researchers who explicitly taught learners how historical texts (typically found in social studies) differ from categorical texts (often found in science), which differ from descriptive texts (found in multiple subject areas), helped the readers comprehend all genres better.

Reading comprehension comprises making conscious inferences and filling in gaps in an argument. Research in South Africa shows that learners in lower grades cannot draw inferences from the texts they read (DoE, 2014a). They often decode print information without any evidence of comprehension whatsoever, whereas reading involves a comprehensive amount of cognitive processing, which includes inferring, integrating and evaluating a text for any inconsistencies and loose-ends (Pretorius, 2000). According to Kispal (2008), the ability to draw inferences predetermines one's reading skills: that is, poor inferencing skills cause poor comprehension.

Manyike (2012) investigated reading and writing performance among 153 Xitsonga Grade 7 learners in township schools. The learners attempted a Reading and Writing Performance Test in Xitsonga, which had been translated from an English version developed by the Human Sciences Research Council. The reading component of the test tested, inter alia, text reorganisation skills and making inferences. Findings indicated that learners performed poorly in both reading and writing skills. For instance, 86.29% of the learners scored below 40%. From the learners who obtained more that 40%, only 5.87% of them obtained more than 50%. Moreover, Makalela (2012) conducted a study in which he sought to provide insights on relationship between reading development in an African language and English among 39 grade 5 learners in the Limpopo province in South Africa. The study was quasi-experimental in which there were a pre-test, intervention programme and post-test. The pre-test results exhibited, inter alia, that learners had not been taught critical thinking and inferencing skills. Instead of being taught to learn textual information by relating it to something one already knew, learners were often taught to memorise the information and simply recall it. In his report in which he explored academic literacy skills of learners at foundation phase, Madiba

(2013) highlights that many learners fail to respond to questions that demanded complex skills of inferential reading. This holds implications for reading and reading development in schools.

The above studies clearly show that there is a need for learners to be explicitly taught inferencing skills at lower grades since they are unable to draw correct inferences when reading texts. Research indicates that pupils are most receptive to explicit teaching of inferencing skills in their early secondary years (Kispal, 2008; Makalela & Fakude, 2014). Numerous annual national assessment reports indicate that teaching inferencing skills is not an easy task for teachers to perform (DoE, 2014b; 2013). The policy document that provides for teaching reading, the National Curriculum and Assessment Policy Statement (CAPS) document, mentions drawing inferencing as one of the strategies learners can use to understand texts better (DoE, 2011b). However, the CAPS document is silent on how inferencing skills should be taught.

Very little research, both local and abroad, has attempted to find out more about teaching inferencing skills at elementary grades. Research in this regard tends to focus more on how to teach comprehension in general rather than inferencing specifically. It is assumed that methods that have been developed for general comprehension work in the classroom have the hallmarks of strategies known to be useful for imparting inference skills (Kispal, 2008), whereas it is one's ability to make correct inferences that aid comprehension, and not the other-way-round.

Research demonstrates that enhanced cognitive and metacognitive skills are achieved when translanguaging techniques are applied in a multilingual classroom (Baker, et al. 2012). However, research on multilingualism and biliteracy has, at least so far, not established the effects of translanguaging when teaching drawing inferences and reading comprehension to learners at elementary grades, whereas the ability to draw inferences is very crucial for reading comprehension.

2.3.3.4 Text reorganisation strategies

One of the means by which one can tell whether a reader has understood a written text is summary writing. A reader may be required to read a text and then provide a shortened version which provides the gist of the text. This entails piecing together words, sentences, paragraphs into a concise, meaningful and coherent passage that presents the main ideas of the original text (Parry, 1996). This process relies on the bottom-up and the top-down processes.

Summary writing is considered one of the difficult tasks through which one can prove comprehension. As a result, learner need to be explicitly taught how to summarise a text in a manner that captures the gist of the text. According to McIntyre, et al. (2011), learners should be able to dispense with unnecessary words and information, interpret vocabulary, analyse events, and, at times, determine the author's purpose. Without proper reading comprehension skills in place, a learner will have a hard time proving their understanding. One of the factors that can make text reorganisation difficult at elementary grades is the learners' insufficient schemata about the content to be summarised (Kirkland & Saunders, 1991). Text reorganisation requires a proper coordination of following: reading skills, to critically evaluate and select information that captures the gist of the text; the reader's language proficiency with proper vocabulary and background knowledge; and the reader's writing expertise to interpret and integrate pieces of information into a coherent and meaningful text. Therefore, summary writing requires the integration of multiple skills and strategies, which predominantly depend on reading comprehension. According to Ngcobo and his colleagues (Ngcobo, et al., 2016) summarising cuts across the various intellectually engaging abilities, like observing and reporting, reading and writing, listening and speaking, which skills one needs to communicate effectively. It is one of the essential literacy skills one needs throughout their academic and professional life.

McIntyre, et al. (2011), suggests various ways in which teachers can help learners become better at writing comprehensive summaries. They suggest, among others, that teachers can use graphic organisers, text conventions, and text structure respectively to summarise text. Teaching summary writing requires a clear demonstration and explicit use of think-alouds by the teacher, and numerous opportunities for learners to practice while they receive continuous

feedback from the teacher. Learners read a short passage of about 2 paragraphs in length after which the teachers takes them through various processes one has to follow when identifying the main idea and supporting details from a text. These include predicting what the main idea, based on the topic (if proved) or after quickly skimming through the passage; reading-on and constantly checking and revisiting the predicted main idea; and helping the learners identify the key phrases and supporting information and writing them next to their main idea.

It has been observed that readers with relevant vocabulary and some knowledge about the subject matter not only comprehend more but they also learn new words easier (Chun & Plass, 1996). Therefore, new ideas, concepts and information can be easily assimilated when they can be related to knowledge that already exists in an individual. However, readers at elementary levels tend to heavily rely on information presented in the text (Alptekin & Ercetin, 2011), which makes them to focus more on surface-level features of the text and constructing the text-based propositional meaning rather than relating the text to their own lived experiences and thus compromise deeper interaction and comprehension of the text.

Summary writing is perceived predominantly as an externally guided exercise which uses a top-down reading processes (Batista, 2014). In the top-down process, the reader reads a text with expectations of what the text will be about, based on their knowledge of text structures and of the world. As a top-down model, reading is viewed as a cognitive process in which a reader applies appropriate knowledge (or schemata) to interpret written texts. To successfully comprehend a text, a reader must be able to create connections while reading by generating inferences that underlie the successful and deep-level comprehension of a text (Best, et al., 2005).

The flipside of the notion of text reorganisation as a top-down approach to reading is the text-based bottom-up approach. As a bottom-up strategy the physical properties of a written/read stimulus are perceived to form the source of information to be summarised. This view posits that the main ideas are primarily inherent and can only be retrieved from the text. The ability to reorganise texts is often attributed to the reader's language proficiency, writing expertise, critical selection and evaluation of source information (Yang & Shi, 2003). It is also influenced by factors like the reader's language processing skills at sentence, intersentential and at paragraph levels. Chun and Plass (1996) observe that the reader's ability to interpret

and integrate pieces of information helps the reader synthesise the text. Therefore, a summary requires a reader to construct the global meaning that integrates multiple sentences and paragraphs of the original text into a coherent summary.

The two views about text reorganisation presented above may seem contradictory and at the extreme ends of the continuum. The dichotomy lies with the source of knowledge: is it the reader or the reading text? The top-down view on the one hand claims that knowledge in the form of schemata comes with the reader, while the bottom-up on the other hand claims that the reading text is the source of knowledge. Nevertheless, the contradiction may be mitigated on the one hand in that the text serves as a stimulus that triggers existing knowledge to enable the reader to make predictions about the content, while existing knowledge, on the other, compensates for certain syntactic deficiencies in the text. Text reorganisation might be a daunting task for learners due to the multiplicity of abilities required to master it; more so if they have to perform the task in a language in which they are not proficient. This might be exacerbated by the learners' lack of adequate reading skills, insufficient vocabulary and limited ability to paraphrase sentences. Essentially, language proficiency plays a fundamental role in one's ability to obtain and adequately communicate the gist of the original text. Therefore, it is advisable to choose texts that are suitable to the learners' reading proficiency level and to always build sufficient schemata through prereading activities and discussions to prepare the learners for the reading text. To mitigate vocabulary language issues that might ensue, a suitable pedagogy that provides for the use of the various linguistic repertoires of the learners may be employed. Therefore, training on summary writing should be done in a language the learners understand well.

The ability to produce a summary demonstrates that the main idea of a text has been grasped by the reader. However, the annual national assessment report (2013) indicates that learners in lower grades are not properly taught and hence are unable to produce texts that capture the gist of a reading passage. Conversely, grade 4 learners are expected to read, comprehend, and respond to written texts critically (Makalela & Fakude, 2014), whereas little attempt is made to teach them the relevant skills to that effect in the preceding grades (see the Curriculum and Assessment Policy Statement (CAPS) for Foundation Phase Grades R to 3 in DBE, 2011b; Madiba, 2013). So far, there has been no attempt to determine whether using IsiXhosa and English, simultaneously, as an intervention programme for reading development could

improve the learners' ability to reorganise texts in either or both languages. Research on the use of 2 languages simultaneously in the same reading lesson is still limited.

2.4 Conclusion

The proceeding chapter presented theoretical frameworks relevant to this study and various factors underpinning the development of a second language have been highlighted. It should be noted, however, that the presented hypotheses, the linguistic interdependence and the threshold hypotheses, adopt a monoglossic approach to language development: languages are treated as separate entities. The hypotheses do not cater for the common underlying proficiencies that aid reading ability across languages, which may allow for the simultaneous development of reading in two languages.

Further, the chapter has provided extensive information on reading and the five components of reading comprehension, namely: information recall ability, text prediction ability, drawing inferences, and text reorganisation strategies. It has been shown how lack of each of these comprehension skills at elementary grades may lead to inadequate reading ability subsequently. As much as there are other factors that may contribute to poor reading performance of Grade 4 learners in South Africa, no much attention is being paid to the monolingual models, practices and approaches that do not serve the needs of multilingual learners. While the national or provincial legislation in education does not prescribe any method in which reading may be developed at schools, there has never been any attempt to determine whether or not using 2 languages, an African language and English, in one classroom simultaneously could improve the learners' ability to comprehend texts in both the learners' Home Language and their First Additional Language. This research challenges the prevailing monolithic ideologies about language in education and affords the opportunity for the engagement of an alternative multilingual approach, translanguaging, to enhance the reading skills of multilingual learners.

Chapter Three: Research methodology

3.1 Introduction

This study investigated the effects of translanguaging techniques on the reading comprehension skills of IsiXhosa:English bilingual learners in Grade 4. In order to come up with valid and reliable results, effective methods were followed to collect relevant data from relevant participants. These included observing the correct protocols to identify, approach and elicit the data from the participants. The proceeding chapter presents the methods and procedures that were followed to collect the data for the study. Furthermore, it provides the details on the research design, sampling, data collection and analysis.

3.2 Population and sampling

Four grade 4 rural schools in Matatiele District in the Eastern Cape were selected to take part in the research. Purposive sampling was used to select the schools. First, the schools were chosen based on their shared characteristics of being in quintile 2. The schools classified as quintile 2 are mostly rural and have the learners from disadvantaged backgrounds measured by the socio-economic conditions of the surrounding communities in which the schools are situated. The learners in these schools are exempted from paying school fees, and are provided with meals at school. Second, the 4 schools were chosen on the basis of the languages used for teaching and learning from Grade R to Grade 3 - IsiXhosa, which is supposed to be the L1 of all or most of the learners at the school, and the learners must be transitioning into English as the language of teaching and learning at Grade 4. Both English, as First Additional Language, and IsiXhosa, as mother tongue, were offered at the schools in grade 4.

Rural schools were considered for the study because they often perform the lowest according to the annual national assessment reports (see DoE, 2014a), and need more support to advance quality education. The Matatiele District has been chosen because it is one of the districts in the Eastern Cape that performs badly in the annual national assessments. The first

two schools whose names starts with a letter closest to *'A'* were assigned to the control groups, while the other 2 were assigned to the experimental groups.

Two hundred and fifteen learners aged between 9 and 12 years at 4 different rural primary schools in the Eastern Cape and their teachers participated in the study. Since the research was conducted in schools, each class remained intact. Grade 4 was deemed suitable for the study because learners at this grade are at a critical stage of reading development: they have been taught in their mother tongue for the past 3 grades, and are transitioning into English as a medium of instruction at grade 4.

3.3 Research design

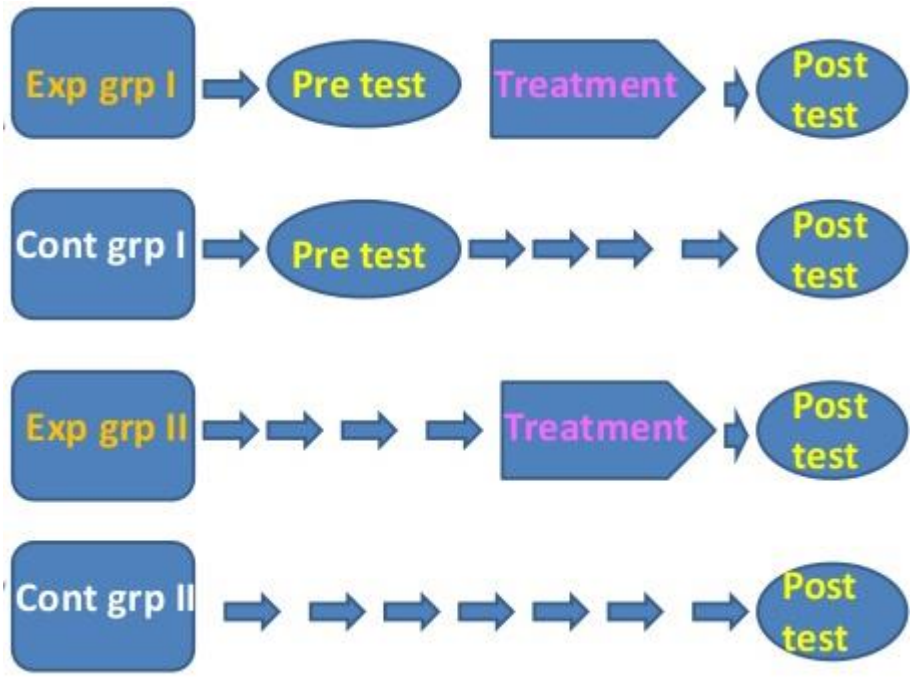
This study used a mixed method approach to data collection and analysis. This approach combines the qualitative and quantitative means of data collection and analysis to get the best from both approaches (Dornyei, 2007). Qualitative data were obtained through a battery of tests that included open ended questions, while quantitative data were derived from the responses of the test-takers. The data collected through qualitative means helped the researcher get an in-depth understanding of the attitude and experiences of individual participant's account about the translanguaging initiative, which would otherwise have been obscured through the often generalised quantitative methodology. In addition, qualitative research is ideal for providing insights into various contextual conditions and influences that might significantly shape the results of the study. Conversely, quantitative means of data collection and analysis have minimised the subjectivity of the researcher through refined quality check statistical analysis.

This study used a pre- and post-test quasi-experimental design. This design is similar to any other experimental research design in that it involves randomised groups, some of which may be pre-tested, and provided with intervention, and all of which get post-tested. In our case, however, since the data were collected from schools, the groups were intact. Due to lack of strict randomisation of groups, the study cannot be truly experimental but quasi-experimental. Like other experimental designs, a quasi-experimental research seeks to find out whether the participants' behaviour might be changed after the participants have been exposed to some intervention or planned learning experience. This design suited this study well because the

researchers would be able to measure the cause-effect connection between the intervention and the learner performance. Furthermore, this design would allow for the data obtained to be analysed within and between the groups of participants. The purpose of the pre- and post-tests was to assess the participants' reading comprehension skills at the baseline and at the end. After the pre-test, a translanguaging intervention was introduced, after which the participants completed a post-test.

The type of quasi-experimental design adopted for the study was a Solomon Four Group design. A Solomon Four design is a pre-test:post-test experimental design. It is similar to other experimental designs in that it has randomised groups, all of which get post-tested. However, in our case, due to lack of strict randomisation of group since the data were collected from schools, where the groups were intact, the study cannot be truly experimental but quasi-experimental. The difference between a Solomon Four Group design and other pre-test:post-test experimental designs is that it has 2 pre-tested experimental groups, one of which gets treatment; and 2 post-tested control groups that have not been pre-tested, one of which gets treatment. In other words, this design allows one to have 4 groups comprising 2 experimental groups and 2 control groups, as illustrated in figure 1 below:

Figure 1. Illustration of Solomon four group design



The design suits this study well because the researcher would be able to measure the cause-effect connection between the intervention and the learner performance. Furthermore, this design allowed for the data obtained to be analysed within each of the pre-tested groups and also between the various groups of participants. Moreover, the design minimizes the problems that might arise concerning internal and external validity, which might arise from quasi-experimental research.

It is noteworthy, though, that quasi-experimental designs have often been met with fierce challenges in educational research. There is an entire range of potential intervening factors that are often embedded in the context that may be hard to control or account for in the results of the experiment. For instance, these factors may include the impact the home environment plays in the process, as well as the availability or lack of resources at the participating schools. As a result, the results of quasi-experimental studies tend to be reduced to the conditions under which they were conducted. To minimise these challenges, the researcher should ensure that the participants have similar characteristics at baseline.

While there might be several challenges about the quasi-experimental research design in educational research that apply across the board, one challenge that should be noted about Solomon-four group design is that it may be difficult for one researcher to administer the intervention to 2 treatment groups at the same time. To overcome this challenge, the researcher ensured that the schools at which the intervention would be administered were not too far apart. This allowed the researcher to observe the intervention at the designated sites within the intervention period albeit not at the same time. This minimised potential internal/external intervening variables like the maturation effect due to delayed intervention, which might compromise the validity of the results of the intervention.

To minimise the likelihood of the placebo or transient effects that might cast doubt to the validity and reliability of the study which could arise due to exposure to the initiative , the groups that participated in the pre-test took the post-test 4 weeks after the pre-test. This allowed for the effects of the pre-test to washout before the control group could attempt the post-test.

3.4 Data collection

Two sets of tests were used to assess the participants' reading comprehension skills in English and IsiXhosa, respectively. The first set was a pre-test while the second was a post-test. There were 15 comprehension check questions for each language. The questions comprised 5 multiple choice questions, 1 short answer question, 4 questions for specific answers, and 5 open ended questions. Of the 15 questions, 3 questions assessed the learner's ability to recall information; 4 assessed their text reorganisation skills; 6 assessed their critical thinking skills and how well they drew inferences from written texts; and 2 assessed their ability to make predictions on how the events might unfold in the text. Each test was written during its period as scheduled on the class timetable.

Each test contained two different reading passages of about 300 words. One passage was used for the pre-test and another for the post-test. The passages were curriculum based fictional narratives about animals. To ensure the quality and the appropriate level of the language in the passages, a readability test was run on the English passages using online readability tests (Readability formulas, 2017). The texts were also checked by an English additional language specialist for appropriateness and were found to be suitable for grade 4. The IsiXhosa passages were sent to an IsiXhosa language specialist who confirmed that the passages were reader-friendly and relevant to grade 4 learners.

The pre-test contained a reading passage of 266 words for IsiXhosa (see Appendix 2) and 336 words for English (see Appendix 1) while the post-test contained 241 words for IsiXhosa (see Appendix 4) and 335 for English (see Appendix 3). Even though the IsiXhosa passage had fewer words, the passage was slightly longer than the English passage due to different orthographies of the languages. A set of 15 comprehension check questions were set from each reading passage. A total of 15 questions per set were deemed sufficient to enable the researcher to make deductions from the answers to determine whether learners could comprehend texts in either language. In essence, the pre-test was relatively similar to the post-test in terms of length, readability and the number of questions but the content was different. Furthermore, the tests had been piloted at a grade 4 class with circumstances similar to the ones at which the research was conducted prior to being administered at the research sites.

The tests were written during the class periods allocated for language teaching on the timetable. During test taking, the teacher read out the passages aloud while the learners read along silently. Soon thereafter, the learners were asked to answer comprehension check questions. They had continuous access to the reading text when answering questions. The comprehension skills assessed were limited to the learners' recall and reorganisation strategies, and how they draw inferences and make predictions when reading texts in IsiXhosa and English. The questions for each language had been typed and printed out on separate A4 size sheets. Each participant had their copy to read from and answer the questions on the answers spaces provided for each question/item. It took 45 to 60 minutes for the learners to complete the pre-test, and about the same length of time to complete the post-test.

3.4.1 Pre-test

As mentioned in the previous chapter, this study adopted a Solomon Four Group quasi-experimental design. This design allows a researcher to have 4 groups comprising 2 experimental groups and 2 control groups. While all the groups were post-tested, the design required that only 2 groups may be pre-tested. Therefore, one experimental group which subsequently received intervention, and one control group which did not, attempted pre-tests in both IsiXhosa home language and English first additional language. A total of 78 learners (54 in the experimental & 24 in the control group) wrote a pre-test in IsiXhosa home language, while 82 (51 in the experimental & 30 in the control group) wrote a pre-test in English. The tests were written on different but consecutive days; therefore, the differing number of participants in the two languages is due to nonattendance by some of the participants on the days on which the tests were written.

3.4.2 Post-test

As per the requirements of the Solomon Four Group quasi-experimental design, all the groups were post-tested, irrespective whether they had received intervention or not. A total of 215 learners wrote a post-test in IsiXhosa home language, while 210 wrote a post-test in English. As it was the case with the pre-test, the differing number of participants is due to

nonattendance by some learners on the day on which the test was taken as the tests were written on different but consecutive days. For the purposes of a clarity in this instance, it is worth noting that there were 2 control groups and 2 experimental groups. The groups referred to as the first control ***(Group C)*** and the first experimental groups (Groups A) were the ones that took a pre-test, while the second experimental ***(Group B)*** and the second control ***(Group D)*** groups did not.

Group A – Pre-test and post-test group and translanguaging group

This was the first experimental group to which a pre-test and a post-test were administered. The researcher was involved during the treatment/intervention process in this group; but he only observed the translanguaging intervention being administered by the trained teachers. One possible constraint that might arise from this group were the experimenter and the Hawthorne effect. To minimize these effects the researcher visited this group and interacted with the participants so that the learner participants could get used to having the researcher around before he could start with the intervention. Furthermore, by inviting the teachers to administer the initiative, the researcher minimised the instructor/experimenter effect which could influence the learner performance even further.

Group B – Post-test and translanguaging group

This was the second experimental group. Unlike the first experimental group, this group received the treatment and was post-tested without having taken any pre-test. The researcher was not actively involved during the intervention process in this group: only the trained class teachers implemented the treatment without any observation from the researcher. This group also took a second post-test after the washout period of 2 weeks.

This group also helped minimise the likelihood of the transient effects inherent to pre-test:post-test experimental studies that might arise due to exposure to the pre-test, or any carryover effects therefrom, that might cast doubt to the validity and reliability of the study; hence, they did not take the pre-test.

Group C - Pre- and post-test control group

This was the first control group to which both the pre-test and the post-test were administered. As it is the case with control groups, the teachers that were involved in this group were not trained; and no treatment/intervention was provided to the participants.

Group D – Post-test control group

This was the second control group. This group took only the post-test without having received any pre-test or treatment/intervention and the teachers that teach reading to this group were not trained on translanguaging. This group also helped minimise the likelihood of the transient effects that might be observed in the first control group ***(Group C)*** due to exposure to the pre-test; hence, this group did not take the pre-test.

3.4.3 Intervention

Translanguaging treatment conditions

The translanguaging intervention was done during the participants' scheduled regular class time and in the regular classrooms used for teaching English and IsiXhosa as subjects during their respective periods. Class visits and detailed descriptive notes of what was happening during the sessions were recorded. The translanguaging treatment was implemented as outlined in each of the following conditions.

Treatment condition 1

Before the intervention, four language teachers who taught in the two experimental schools were offered some training on translanguaging - they were involved in developing lesson plans on teaching reading in more than one languages simultaneously in the same class. During the induction process, the researcher demonstrated how one could use more than one languages simultaneously in one classroom. More attention was paid on how to use translanguaging methods to teach text recall and reorganisation skills, and how to engage translanguaging to teach learners to draw inferences and make predictions when reading

texts. After the training, the teachers were provided with lesson plans and stories they would use to implement the initiative as suggested.

Treatment condition 2

This treatment condition involved the implementation of translanguaging techniques in the classroom. Translanguaging treatment was introduced a day after the learners had written pre-tests. The researcher remained available to provide guidance at the first experimental group site, while the teachers who had been trained on the approach provided the intervention to the second experimental group in a different school. There were drilling exercises that explicitly showed how learners should recall, draw inferences and make predictions when reading texts (see Appendix 11 & 12).

Learners were provided with one reading passage in which both IsiXhosa and English had been used in respective paragraphs. Short passages of about 50 words were used to introduce the concept of reading a text in one language and answering questions in a different one (see Appendix 7). After 3 encounters (i.e. 3 class periods of 1 hour each), the length of reading passages was increased to about 300 words (see Appendix 11 & 12). The passages that were used for the translanguaging treatment were curriculum based fictional narratives that had been obtained from the learners' text books and Nal' ibali (2016), a website that hosts short stories for young readers. The following procedure, details of which were outlined in the lesson plan (see Appendix 8), was followed:

Before reading, learners were encouraged to make predictions about the text to be read, including what they thought the text would be about based on the key words that were usually provided at the beginning of the class.

Reading was done in an interactive way in which the teacher read the text aloud while the learners read along silently. At some point during the reading, the teacher asked the learners to take turns reading the text aloud while the rest of the class was reading along silently. During the exercise, the teacher often checked with the learners to verify or redirect their predictions. This was done in a dialogical way in which the teacher asked a question or questions to get learners to respond or think about the predictions they made at the beginning of the reading. In other words, think-aloud strategies, as outlined in Pannell (2014) were

adopted, in which the teacher read the text aloud, paused at certain points and asked questions, answers of which could only be provided by making logical inferences, and then verbalized his thinking in order to help learners make the correct inferences. Learners were guided on how to apply prior knowledge and the facts from the text to draw correct inferences. For questions whose answers could be located in the passage, even though not explicitly stated in one sentence, the learners were required to provide evidence on which they based their reasoning. In essence, each answer a learner provided was often followed up by the question: "How do you know? Please, support your answer", which was always asked in a different language from the one the answer was written in. Having learners explain their answers helped them to think a little deeper about what they were doing. The teacher modelled the inferencing procedure until the learners could begin to take over the necessary steps, finally reasoning successfully on their own.

When the teacher had finished reading, the learners read the passage again, silently, and were asked to 'trick a friend' - an activity in which they worked in pairs; retold the story or ask each other thought-provoking questions about what they had just read. They were then required to summarise in one or two sentences what the passage was about - the gist of the text.

In short, translanguaging methods were used to explicitly teach the learners how to read a text through juxtaposition of languages of input:output, with special focus on making predictions before reading a text, drawing inferences while reading, and being able to recall and summarise the text after reading it. To deepen understanding, for questions whose answers could be located in the passage, even though not explicitly stated in one sentence, learners were required to provide evidence on which they based their reasoning. If the story was read in English, learners were asked questions that would require them to draw inferences, make predictions and provide answers in IsiXhosa. If the story was read in IsiXhosa, the same held. The output was required both orally and in writing. This exercise was repeated for several days, using different text types.

3.5 Data analysis

Data obtained from the two groups that were pre-tested was analysed, and the pre-test and post-test scores were measured within each group, and then between the two groups. The pre-test scores were used to provide baseline on which the effects of the intervention could be estimated.

The participant teachers assisted with the administration of the tests, while the researcher collected all the tests scripts for marking. The marks obtained by each participant learner were assessed for covariance and interrater reliability.

Post-test scores from all the groups were analysed and compared, first, within each pre- and post-tested group, and then between and across other groups. Particular attention was paid to the correlation between the groups that received treatment and those that did not, in order to see if there was any difference in the performance in reading comprehension due to intervention/treatment.

All the data were first quantified according to common patterns as provided in the objectives of the study, and then analysed quantitatively using descriptive statistics to obtain measures of central tendencies (mean) and dispersion (standard deviations). Statistical analysis of variances (ANOVA) was run to determine whether there were any statistically significant differences between the mean scores obtained from the various groups of participants. To this effect, correlations were pitched at an alpha value of 0.05 to measure statistical significance. T-tests were also run to measure the variances of the distributions of the mean scores within each group and between the various sets of the participating groups.

3.6 Validity and reliability

Internal validity

To establish a reliable and valid connection between the cause and effect, the research minimised any event that might cast doubt to the cause-effect connection. To minimise any Hawthorne or placebo effect, which might result in improved performance by the pre-test

groups due to merely taking the pre-test, the post-test results of the groups that had taken the pre-test were measured against those of the groups that did not take the pre-test.. This also helped minimise the likelihood of a transient or carryover effect which is a lasting effect that occurs due to exposure to the initiative. To ensure sustainability to the study, the researcher trained teachers in groups A and B and ask them to continue with the initiative. Any event not provided for in the treatment schedule but towards which the researcher was influential, biased, or probably caused a particular effect was noted down and accounted for in detail.

The marks obtained by each participant learner were assessed for covariance and interrater reliability. The interrater reliability showed a high level of consistency: the markers agreed more than 95% of the time. This helped minimise any researcher bias which would render the results of the study invalid and unreliable. To strengthen the internal validity of the study even further, a validation interview in which the participant teachers were asked to view the first draft and the tentative results of the study was conducted. During this process, the participants were once again taken through the procedure followed to collect data, and then shown how the data were analysed and interpreted to arrive at the results.

External validity

Regarding external validity, the results may not be generalised since the number of participants cannot be representative of all grade 4 learners in South Africa. Within the scope of this study, however, it is possible to claim validity since the researcher had a recognisable number of participants to collect data from. Further, the data were read several times to check for any possibility of factors that might require further analysis until a saturation point was reached.

3.7 Ethical considerations

Ethical considerations deal with the moral principles that might be violated by the researcher during the research (Bryman, 2008). It also includes the consideration of safety and privacy issues, or any other harm that may be suffered by a participant due to participating in the research. By its design, this study dictates that there should be treatment and control groups, the former of which receive intervention while the latter do not. Denying intervention to the

control groups might raise ethical questions when participants in the treatment group benefited from the intervention (National Center for Technology Innovation, 2011). Since treatment groups and control groups in this study were different schools, the control groups were in the same state as they would have been had they not participated in the study - denying them intervention did not harm them in any way and was, therefore, ethical. Further, to ensure that ethical standards are adhered to, the researcher undertook to follow the procedure outlined below:

Permission from the University ethics committee

Permission to conduct the study was obtained from the Research and Ethics Committee of University of the Witwatersrand, Johannesburg, the institution at which the researcher was registered (see Appendix 5). The proposal outlining the full details of the research was submitted to the committee for perusal to ensure that it adheres to the university's research ethics.

Permission from the Participants

Before the researcher could commence with the study, permission to do so and to interact with the participants was obtained from the Eastern Cape Department of Education (see Appendix 6), the school principal and members of the school governing body (see Appendix 17). Informed passive consent was also obtained from the parents/guardian of the learners (see Appendix 13, 14 & 15), while informed active consent was obtained from the teachers concerned (see Appendix 16). Passive consent in this regard means that parents/guardians were advised of the details of the study and were provided with an '*I object*' form which they would sign and return if they did not want their child to participate in the study. Thus their quiescence was assumed to indicate acquiescence. Passive consent was deemed appropriate for this study since, first, it did not contradict any South African law, and second, teachers were deemed to be in the right position to actively consent for the learners since they understood the details of the study better. In addition, Dornyei (2007) observes that a formalized request for consent might be off-putting to some people, or can raise undue suspicion that something might go wrong with the study, thereby discouraging a certain group of participants from partaking. Nonetheless, all the participants - the Eastern Cape

Department Education, the school principal, members of the SGB, parents/guardians, teachers and the learners - were made aware of the following:

- the aim of the study;
- that the participants would be requested to respond to some questions orally and in writing;
- that the questions the participants would respond to would be used for the purposes of the research, and the responses thereto would be used for the said purpose only;
- that there were no known or foreseeable serious risks any of the participants would suffer due to fully or partially participating in the study;
- that, should any of the participants feel somehow uncomfortable responding to any of the questions, that participant was welcome not to respond to that particular question;
- that, should any of the particiapnts somehow feel uncomfortable responding to the questions, the participant was welcome to skip it or withdraw their consent and participation to the study, and, if that were to be the case, the responses they would had provided thus far would be shredded and not be considered for any purposes whatsoever;
- that the participants' responses would be kept confidential and anonymous and then destroyed after 5 years; and
- that participation in the study would not interfere with the school timetable and other programmes in any way.

3.8 Limitations

One may have noted that during the test taking, the teachers read out the passages and the questions to the learners, while learners listened and read along silently. This deviates from the standard test/exam-taking procedure in which a learner reads on their own, silently and then answers the questions. Moreover, the participants were assessed on the variables the study sought to investigate, and ignored other aspects that may be considered in a comprehensive examination in which comprehension is encompassed. During a normal examination, for instance, learners are often required to produce a piece of writing or answer questions using correct language, grammar and punctuation. Thus, one may argue that if the teachers had not read out to the learners and the scope of the research had not been limited to the said variables, it is not unlikely that the results of the study could have been different.

It is worth noting that the design used in this study, a quasi-experimental design, has often met challenges in educational research. This is because there may be a number of intervening factors embedded in the context that may be hard for the researcher to control or account for in the results of the experiment. These may include the impact the home environment plays in the process, as well as the availability or lack of resources at the participating schools. As a result, the findings of this study should be confined to the conditions under which they were conducted.

Even though this study might be challenged due to the intervening variables inherent to quasi-experimental design in education, the variables were minimised as the researcher ensured that the learners had similar *sui generis* characteristics at baseline. The characteristics include the grade, the age and the language background of the learners. Moreover, within the scope of this study, the findings are valid since the researcher had a recognisable number of learners from whom data were collected. The data for this study was collected from 215 grade 4 learners from 4 different schools. Furthermore, the data were examined several times to check if there were any more possible factors that might require further analysis, until a saturation point was reached. Nonetheless, it is advisable not to generalise and assume that the 215 learners are a fair representation of all grade 4 learners in rural school in South Africa. Further research with a bigger population is required.

3.9 Conclusion

The proceeding chapter discusses how data were collect and analysed for the study. It, briefly, provided the design used in the study. Furthermore, it provided details on how translanguaging intervention was implemented with special focus on teaching the participants how to make predictions before reading a text, draw inferences while reading, and be able to recall and summarise the text after reading it. Discussed in this chapter are the following: population and sampling, the research design, data collection and analysis, ethical considerations as well as validity and reliability issue related to the study.

Chapter Four: Data presentation and findings

4.1 Introduction

The aim of the study was to investigate the effects of translanguaging techniques on the reading development of grade 4 Xhosa-English bilinguals. Presented here are the data and the findings related to the questions the study sought to answer. The findings are organised according to common patterns and themes based on the questions that guided the study, and then analysed quantitatively using descriptive statistics to obtain measures of central tendencies (mean) and dispersion (standard deviations). Statistical analysis of variances and correlations were pitched at an alpha value of 0.05 to measure statistical significance.

4.2 Text recall abilities

4.2.1 Recall ability in IsiXhosa

The participants in the first experimental ***(Group A)*** and the first control ***(Group C)*** groups were assessed on their ability to recall information that they read from the target texts. For IsiXhosa home language, the post-test results indicated an improved performance for the two groups. The participants in the first experimental group ***(Group A)*** displayed much more improvement than those in the control. The descriptive measures of central tendencies and dispersion of the results of this assessment are presented in table 4.2 A below:

Table 4.2 A: Recall ability in IsiXhosa

	Experimental Group A		Control Group C	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Mean	1.88	2.86	1.46	2.19
N	50	50	24	32
Std. Deviation	0.92	1.07	1.10	1.26
t-test & p value	t= 4.65; df=49; p <0.05		t= 1.57; df=23; p >0.05	
	t= 3.39; df= 31; p <0.05			

The table above displays the mean scores of the participants from the first experimental group ***(Group A)*** and the first control group ***(Group C)*** on text recall abilities in IsiXhosa home language. It shows that the participants in the first experimental group ***(Group A)*** obtained a mean score of 1.88 and a standard deviation of 0.92 in the pre-test, and 2.86 with a standard deviation of 1.07 in the post-test. With the standard deviation lower than the mean, the level of homogeneity in the group's abilities to recall information was deemed strong both at the pre-test and post-test. In other words, the scores of most of the participants could be located around a central point. At face value, the mean scores of the two tests show that the participants performed even better in the post-test than they did in the pre-test. To verify this assumption, the pre- and post-test scores were run in a t-test. The results of the t-test reflected a statistically significant difference at an alpha value of 0.05 (t= 4.65; df=49; p <0.05). This rejects the null hypothesis which posited that performance of the participants on recalling information would remain the same regardless of the intervention. In essence, the results show that translanguaging enhanced the participants' ability to recall information when reading in IsiXhosa, thus improving reading comprehension.

With regards to the first control group ***(Group C)***, the table shows that the group obtained a mean score of 1.46 with a standard deviation of 1.10 in the pre-test, and 2.19 with a standard deviation of 1.26 in the post-test. The group displayed an improved performance in the post-

test than the pre-test. The scores of the two assessments were measured in a t-test to measure the significance of their variability. The results of the t-test, however, reflected that the difference between the pre-test and the post-test was statistically non-significant at an alpha value of 0.05 (t= 1.57; df=23; p >0.05). This, therefore, accepts the null hypothesis which posited that performance of the participants on remembering information would remain the same between the pre-test and the post-test. In other words, the fact that there seems to be some improved learner performance should be viewed with caution since there might be some shadow on the researcher's overall results.

The post-test scores of the first experimental (M= 2.86; SD= 1.07) and the first control (M= 2.19; SD= 1.26) groups, the groups that had also taken a pre- and a post-test, were tested via a t-test to measure their variability. The results revealed that the differences between the two groups were statistically significant at an alpha value of 0.05 (t= 3.39; df= 31; p <0.05). The null hypothesis, which predicted no variability between the two groups was therefore rejected.

An analysis was also run between the second experimental ***(Group B)*** and the second control ***(Group D)*** groups. The table below shows the results of the two groups.

Table 4.2 B: Recall ability in IsiXhosa – Post-test results

	Experimental Group B	Control Group D
Mean	3.06	2.60
N	98	35
Std. Deviation	0.98	1.14
t-test & p value	t= 2.62; df= 34; p <0.05	

Concerning the groups that wrote the post-test only, the second experimental ***(Group B)*** and the second control ***(Group D)*** groups, it was observed that the second experimental group ***(Group B)*** obtained a mean score of 3.06 and a standard deviation of 0.99, while the second control ***(Group D)*** obtained a mean score of 2.60 and a standard deviation of 1.14. With the dispersion levels far lower than the mean, the second experimental group ***(Group B)*** was

found to be more homogenous than the second control group ***(Group D)***. The t-test results of the two groups indicated a statistically significant difference at an alpha value of 0.05 (t= 2.62; df= 34; p <0.05) and, therefore, rejects the null hypothesis. Thus, concerning text recall ability, the participants in the second experimental group ***(Group B)*** demonstrated relatively better performance than those in the control, which affirms the effectiveness of translanguaging on the participants' ability to recall information when reading in IsiXhosa.

A comparison of the mean scores obtained from the groups that took the pre-test and the mean scores of the groups that did not take the pre-test showed that the no-pre-test groups performed just about the same as the pre-test groups, with marginal differences. This refuted any possibility of the carryover effect that might put the pre-test groups at an advantage over the no-pre-test groups due to prior exposure to a similar assessment during the pre-test. To consolidate the absence of the carryover effect, and to measure the significance of the variance between the four groups' performances on text recall ability in IsiXhosa, a One-Way ANOVA was run on the post-test scores obtained from the four groups (i.e. ***groups A, B, C, & D***). The table below shows the results of the ANOVA in which variance in performance within each of the groups that wrote the pre-test and the post-test (i.e. ***groups A & C***), and between the four groups was measured.

Table 4.2 C: ANOVA results on recall ability in IsiXhosa

	SS	df	MS	F	P
Between-treatments	20.2537	3	6.7512	6.01244	.000599
Within-treatments	236.9277	211	1.1229		
Total	257.1814	214			

The results of the ANOVA displayed an f-ratio value of 6.01244, and a p-value of .000599. Therefore, the differences in the performance between the four groups were statistically significant at an alpha value of 0.05. (f = 6.01244; df = 3; p < 0.05). Thus, the null hypothesis which predicted that there would be no difference in the performance between the four groups was rejected.

4.2.2 Recall ability in English

Concerning English, the participants' first additional language, the post-test results indicated some regressed performance on the first experimental ***(Group A)*** and the first control ***(Group C)*** groups. The regression was measured within and between the groups to measure its extent. The descriptive measures of central tendencies and dispersion of the results of this assessment are presented in the table below:

Table 4.2 D: Recall ability in English

	Experimental Group A		Control Group C	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Mean	1.16	0.93	1.07	0.94
N	51	54	30	31
Std. Deviation	0.92	0.80	1.11	1.09
t-test & p value	t=1.450; df=50; p >0.05		t= 4.65; df=49; p >0.05	
	t= 0.392; df= 30; p= >0.05			

The above table shows the mean scores of the participants from the first experimental group ***(Group A)*** and the first control group ***(Group C)*** on text recall abilities in English first additional language. The table also shows that the participants in the first experimental group ***(Group A)*** obtained a mean score of 1.16 with a standard deviation of 0.92 in the pre-test, and 0.93 with a standard deviation of 0.80 in the post test. The post-test results indicated some regressed performance since the mean score of the post-test was lower than the pre-test's. The differences between the pre-test and the post-test results were tested via a t-test. The results revealed that the differences between the two assessments were statistically non-significant at an alpha value of 0.05 (t=1.450; df=50; p >0.05). The null hypothesis, which predicted that there would be no difference in the performance between the two assessments was therefore confirmed. This implies that the translanguaging techniques were not so

effective in inducing the participants' ability to recall information read from an English additional language text. However, the fact that there was a difference in the performance between the two assessments should be viewed with caution since there might be some shadow on the researcher's overall results.

With regards to the first control group ***(Group C)***, the participants obtained a mean score of 1.07 with a standard deviation of 0.94 in the pre-test, and 1.11 with a standard deviation of 1.09 in the post-test. With the post-test mean score lower than that of the pre-test, the results indicated a regressed performance on the participants. Furthermore, the dispersion levels in both tests were higher than the mean score, which indicated that the group was heterogeneous. As it was the case in the first experimental group, the results of the t-test reflected a statistically non-significant difference between the pre-test and the post-test at an alpha value of 0.05 ($t= 4.65$; $df=49$; $p >0.05$). Therefore, the null hypothesis, which predicted that there would be no difference in the performance between the two tests was confirmed. Thus, difference in the performance between the two assessments should be viewed with caution since there might be some shadow on the researcher's overall results.

A t-test was run to measure the significance levels of the difference between the first experimental ***(Group A)*** and the first control ***(Group C)*** groups. The results reflected that the two groups were not statistically significant at an alpha value of 0.05 ($t= 0.392$; $df= 30$; $p= >0.05$). This implies that the null hypothesis which predicted that there would be no difference between the two groups regardless of the intervention was therefore confirmed.

An analysis was also run between the second experimental ***(Group B)*** and the second control ***(Group D)*** groups. The table below shows the results of the two groups.

Table 4.2 E: Recall ability in English - Post-test results

	Experimental Group B	Control Group D
Mean	0.93	1.23
N	95	30
Std. Deviation	0.87	0.86
t-test & p value	t= 0.893; df= 29; p >0.05	

Concerning the groups that did not write the pre-test, which were the second experimental ***(Group B)*** and the second control ***(Group D)*** groups, the results indicated that the second experimental group ***(Group B)*** obtained a mean score of 0.93 with a standard deviation of 0.87, while the second control group ***(Group D)*** obtained a mean score of 1.23 with a standard deviation of 0.86. Each group displayed a stronger level of homogeneity since the standard deviation for each was lower than the mean. However, the second control group ***(Group D)*** performed better than the second experimental hence the mean of the former is higher. The t-test results of the two groups reflected a statistically non-significant correlation between the two groups at an alpha value of 0.05 (t= 0.893; df= 29; p >0.05). Therefore, as it was the case with the first experimental ***(Group A)*** and the first control ***(Group C)*** groups with regards to English, the null hypothesis which predicted that there would be no difference between the two groups due to the intervention was confirmed. Thus, the fact that there was a difference in the performance between the two assessments should be viewed with caution since there might be some shadow on the researcher's overall results.

To measure the extent of the possible carryover effect that might have occurred due to exposure to the pre-test, the mean scores of the post-test obtained from the groups that took the pre-test and the mean scores of post-test of the groups that did not take the pre-test were compared. The results showed that the performance of the two sets of groups was just about the same, with marginal differences. This refuted any possibility of the carryover effect that might put the pre-test groups at an advantage over the no-pre-test groups due to prior exposure to a similar assessment during the pre-test. Furthermore, a One-Way ANOVA was run on the post-test scores obtained from the four groups (i.e. ***groups A, B, C, & D***) to measure the significance of the variance between the four groups' performances on text recall

ability in English. The table below shows the results of the ANOVA in which variance in performance within each of the groups that wrote the pre-test and the post-test (i.e. ***groups A & C***), and between the four groups was measured.

Table 4.2 F: ANOVA results on recall ability in English

	SS	Df	MS	F	P
Between-treatments	2.403	3	0.801	F = 1.02219	0.383778
Within-treatments	161.4255	206	0.7836		
Total	163.8286	209			

The results of the ANOVA displayed an f-ratio value of 1.02219, and a p-value of 0.383778. Therefore, the differences in the performance between the four groups were statistically non-significant at an alpha value of 0.05. ($f = 1.02219$; $df = 3$; $p > 0.05$). Thus, the null hypothesis which predicted that there would be no difference in the performance between the four groups was confirmed.

4.2.3 A comparison of recall ability between English and IsiXhosa

The results each group obtained for each language were analysed to measure the extent of the influence of translanguaging on the recall ability between the two languages. Table 4.2 G below displays the post-test results of the two languages for the experimental and the control groups.

Table 4.2 G: A comparison of recall ability between English and IsiXhosa

	Experimental groups		Control groups	
	Xhosa	English	Xhosa	English
Grand mean	2.99	0.93	2.40	1.08
N	148	149	67	61
Std. Deviation	0.99	0.84	1.20	0.99

The table above shows that the participants in the experimental groups scored a grand mean of 2.99 with a standard deviation of 0.99 in IsiXhosa, whereas they obtained a grand mean score of 0.93 with a standard deviation of 0.84 in English. With regard to IsiXhosa, the grand mean (2.99) is higher than that of English (0.93). Each standard deviation is lower than its grand mean in both IsiXhosa and English. This suggests that the participants in the experimental groups were fairly homogenous in both languages at post-test. With regards to the control groups, the table shows that the groups obtained a grand mean score of 2.40 with a standard deviation of 1.20 in IsiXhosa, while their grand mean was 1.08 with a standard deviation of 0.99 in English. As it was the case with the experimental group, the grand mean in IsiXhosa (2.40) is higher than that of English (0.99). Also, the standard deviation for each language is lower than its grand mean. This, therefore, suggests that the participants in the control groups were fairly homogenous in both languages at post-test.

The results show that the level of homogeneity was stronger in IsiXhosa than it was in English for both the experimental and the control groups, since their standard deviations in IsiXhosa were the furthest from their grand means. With a higher grand mean and a stronger level of homogeneity, the results show that the participants in the experimental groups performed better in isiXhosa than they did in English when it comes to remembering text information; yet, both fall below the international benchmark of 75%.

Table 7 above also shows that the experimental groups obtained a higher grand mean score in IsiXhosa (2.99), while the control groups obtained a higher grand mean in English (1.08).

The scores obtained in each language were tested via a t-test to measure the variability between the two sets of groups. The table below shows a comparison of the grand mean scores and the results of the t-test on text recall ability between the experimental and control groups for IsiXhosa.

Table 4.2 H: A comparison of the grand mean scores and p value on text recall ability in IsiXhosa

	Experimental groups	Control groups
	Xhosa	Xhosa
Grand mean	2.99	2.40
N	148	67
Std. Deviation	0.99	1.20
t-test & p value	t= 3.768; df= 213; p <0.05	

The above table shows a comparison of the grand mean scores and the results of the t-test on text recall ability between the experimental and control groups for IsiXhosa. The t-test results revealed that the differences between the two sets were statistically significant at an alpha value of 0.05 (t= 3.768; df= 213; p <0.05). The null hypothesis, which predicted no variability in performance between the experimental and the control groups was therefore rejected.

The English scores too were subjected to a t-test. The table below shows a comparison of the grand mean scores and the results of the t-test on text recall ability between the experimental and control groups for English.

Table 4.2 I: A comparison of the grand mean scores and p value on text recall ability in English

	Experimental groups	Control groups
	English	English
Grand mean	0.93	1.08
N	149	61
Std. Deviation	0.84	0.99
t-test & p value	t= 1.159; df = 208; p >0.05	

The above table shows a comparison of the grand mean scores and the results of the t-test on text recall ability between the experimental and control groups for English. The results of the test indicated that the differences in performance between the two sets were statistically non-significant at an alpha value of 0.05 (t= 1.159; df = 208; p >0.05). In this regard, the null hypothesis which had predicted that there would be no difference in the performance between the two sets regardless of the intervention was confirmed. This also implies that the difference in the performance between the two assessments should be viewed with caution since there might be some shadow on the researcher's overall results.

At face value - looking at a higher grand mean and a stronger level of homogeneity - the results in table 4.2 G show that the participants in the experimental groups performed better in one language than they did in the other when it comes to recalling information. To consolidate this assumption, the scores of the experimental groups were subjected to further t-test to measure the extent of the difference in the performance between the first additional language and the home language. The table below shows a comparison of the grand mean scores and the results of the t-test of the experimental group on text recall ability between IsiXhosa and English.

Table 4.2 J: A comparison of the grand mean scores and p value on text recall ability between IsiXhosa and English

	Experimental groups	
	Xhosa	English
Grand mean	2.99	0.93
N	148	149
Std. Deviation	0.99	0.84
t-test & p value	t= 19.380; df= 295; p <0.05	

The above table compares the grand mean scores and the results of the t-test of the experimental group on text recall ability between IsiXhosa and English. The results indicated a statistically significant difference between the languages at an alpha value of 0.05 (t= 19.380; df= 295; p <0.05). Thus, the null hypothesis which had predicted that there would be no difference in the performance between the two languages regardless of the intervention was rejected. This means that as far as recalling information was concerned, translanguaging techniques were more effective in IsiXhosa than they were in English.

4.2.4 The effects of translanguaging techniques on recall abilities

The results showed a positive correlation between the translanguaging techniques and learner performance on the ability to recall information in IsiXhosa. In other words, performance improved in the post-test in the learners' home language due to the intervention. With regards to English, the results displayed regressed but statistically non-significant performance. This is consistent with findings in other studies in which it has been observed that when learners attempt assessments in a second language, their performance tends to be lower, which makes it hard to measure and account for their true ability (Alptekin & Ercetin, 2011).

The findings in this regard contradict other findings on the effects of translingual techniques on the recall abilities of English second or foreign language learners. For instance, Ong and

Zhang (2018) investigated the effects of code-switched reading tasks on Chinese bilingual learners' vocabulary recall ability. In their study, the experimental group was provided with a reading comprehension passage consisting of unfamiliar second language target words, whose translations were either glossed in the text margin or listed at the end of the text. The results showed that the experimental group's recall scores were higher than those of the control group. Even though the findings in Ong and Zhang's (2018) and this study looked on the recall abilities of multilinguals, it is worth noting some minor differences: in the former's study the participants were undergraduates, while this study was conducted among grade 4 learners. Furthermore, the participants in Ong and Zhang's (2018) study completed a gap-fill task, while this study required the participants to demonstrate their knowledge, firstly, by selecting the correct answers from the lists of answer options provided, and, secondly, by producing meaningful sentences in which they provided specific correct answers, albeit obtainable from the reading passage.

The fact that learners did not perform well in English can be attributed to a number of factors, which include that text recall as a comprehension skill is not only confined to simply remembering or locating information presented in the reading text. In other words, evaluating the said skill inevitably requires the learners to draw from the coordination of various abilities that are essential in reading, such as morphology and vocabulary knowledge. In grade 4, unfortunately, the requisite skills for text recall are still lacking in the learners' additional language. Thus, dealing with assessments in an additional language proves to be a challenge for grade 4 learners irrespective of the fact that the learners may have continuous access to the reading text when answering questions.

4.3 Drawing inferences

4.3.1 The ability to draw inferences in IsiXhosa

The participants in the experimental and the control groups were assessed on their ability to draw inferences from the target texts. For IsiXhosa home language, the post-test results indicated an improved performance in the first experimental group ***(Group A)*** and the first control group ***(Group C)***. The descriptive measures of central tendencies and dispersion of the results of this assessment are presented in the table below:

Table 4.3 A: Drawing inferences in IsiXhosa

	Experimental Group A		Control Group C	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Mean	4.41	5.26	3.81	4.13
N	54	50	24	32
Std. Deviation	1.30	1.40	2.04	1.73
t-test & p value	t= 1.194; df= 49; p <0.05		t= 0.818; df=23; p >0.05	
	t= 4.710; df= 31; p <0.05			

The table above displays the mean scores of the participants from the first experimental group ***(Group A)*** and the first control group ***(Group C)*** on drawing inferences in IsiXhosa home language. It shows that the participants in the first experimental group ***(Group A)*** obtained a mean score of 4.41 and a standard deviation of 1.30 in the pre-test, and 5.26 with a standard deviation of 1.40 in the post-test. This means that the participants performed even better in the post-test than they did in the pre-test. With the standard deviation lower than the mean in both cases, it was confirmed that the level of homogeneity in the group's abilities to draw inferences was strong both at the pre-test and post-test. In other words, the scores of most of the participants could be located around a central point. Furthermore, the scores obtained in the pre-test and the post-test were measured in a t-test for variability. The t-test results reflected a statistically significant difference between the two at an alpha value of 0.05 (t= 1.194; df= 49; p <0.05). This rejects the null hypothesis which posited that performance of the participants on drawing inferences would remain the same regardless of the intervention. In essence, the results show that translanguaging enhanced participants' ability to draw inferences when reading in IsiXhosa, thus improving reading comprehension.

With regards to the first control group ***(Group C)***, the table shows that the group obtained a mean of 3.81 with a standard deviation of 2.04 in the pre-test, and 4.13 with a standard deviation of 1.73 in the post-test. With the dispersion levels far lower than the mean in the post-test, the group was deemed to be more homogenous in the post-test; which means that

the scores of most of the participants in the post-test could be located in the central point. The participants obtained a higher mean score in the post-test than they did in pre-test, which makes one assume that the participants performed better at the post-test. To verify this assumption, the results of the two tests were measured in a t-test. Contrary to what was noted in group A, the first experimental group, the results of the t-test, reflected that the difference between the pre-test and the post-test of group C was statistically non-significant at an alpha value of 0.05 (t= 0.818; df=23; p >0.05). This, therefore, accepts the null hypothesis which posited that performance of the participants on the ability to draw inferences would remain the same between the pre-test and the post-test. Thus, the fact that there was a difference in the performance between the two assessments should be viewed with caution since there might be some shadow on the researcher's overall results.

The post-test results of the first experimental (M= 5.26; SD= 1.40) and the first control (M= 4.13; SD= 1.73) groups were tested via a t-test. The results revealed that the differences between the two groups were statistically significant at an alpha value of 0.05 (t= 4.710; df= 31; p <0.05). The null hypothesis, which predicted no variability between the two groups was therefore rejected. This implies, therefore, that translanguaging was effective in inducing the ability to draw inferences from texts in IsiXhosa in grade 4.

An analysis was also run between the second experimental ***(Group B)*** and the second control ***(Group D)*** groups. The table below shows the results of the two groups.

Table 4.3 B: Drawing inferences in IsiXhosa - post-test results

	Experimental Group B	Control Group D
Mean	2.88	4.54
N	24	35
Std. Deviation	2.01	1.62
t-test & p value	t= 1.110; df= 34; p >0.05	

Concerning the groups that wrote the post-test only, the second experimental ***(Group B)*** and the second control ***(Group D)*** groups, it was observed that the second experimental group ***(Group B)*** obtained a mean score of 2.88 and a standard deviation of 2.01, while the second control ***(Group D)*** obtained a mean score of 4.54 and a standard deviation of 1.61. With the dispersion levels far lower than the mean, the second control group ***(Group D)*** was found to be more homogenous than the second experimental group. The t-test results indicated that the difference between the two groups was statistically non-significant (t= 1.110; df= 34; p >0.05) at an alpha value of 0.05 and, therefore, accepts the null hypothesis. In other words, even though the participants in the second control group ***(Group D)*** demonstrated a relatively better performance than those in the experimental, the control group's ability to draw inferences when reading in IsiXhosa should be viewed with caution since there might be some shadow on the researcher's overall results.

A One-Way ANOVA was run on the post-test scores obtained from the four groups (i.e. ***groups A, B, C, & D***) to measure the significance of the variance between the four groups' performances on the ability to draw inferences in IsiXhosa. The table below shows the results of the ANOVA in which variance in performance within each of the groups that wrote the pre-test and the post-test (i.e. ***groups A & C***), and between the four groups was measured.

Table 4.3 C: ANOVA Results on the ability to draw inferences in IsiXhosa

	SS	Df	MS	F	P
Between-treatments	55.7019	3	18.5673	F = 6.48137	.000324
Within-treatments	604.4562	211	2.8647		
Total	660.1581	214			

The results of the ANOVA displayed an f-ratio value of 6.48137, and a p-value of .000324. Therefore, the differences in the performance between the four groups were statistically significant at an alpha value of 0.05. (f = 6.48137; df = 3; p < 0.05). Thus, the null hypothesis which predicted that there would be no difference in the performance between the four groups was rejected.

4.3.2 The ability to draw inferences in English

Concerning English first additional language, the post-test results indicated some improved performance on the first experimental ***(Group A)*** and the first control ***(Group C)*** groups. The descriptive measures of central tendencies and dispersion of the results of this assessment are presented in table 11 below:

Table 4.3 D: Drawing inferences in English

	Experimental Group A		Control Group C	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Mean	0.92	2.06	1.87	2.01
N	51	54	30	31
Std. Deviation	1.13	2.03	1.57	1.95
t-test & p value	t= 3.556; df=50; p <0.05		t= 1.447; df=29; p >0.05	
	t= 0.629; df= 30; p= >0.05			

The above table shows the mean scores of the participants from the first experimental group ***(Group A)*** and the first control group ***(Group C)*** on the ability to draw inference in English first additional language. The table shows that the participants in the first experimental group ***(Group A)*** obtained a mean score of 0.92 with a standard deviation of 1.13 in the pre-test, and 2.06 with a standard deviation of 2.03 in the post test. With the post-test mean score higher than that of the pre-test, the results indicated an improved performance on the participants. Also noted was some improvement on the dispersion levels: the standard deviation was lower than the mean, which meant that the group's level of homogeneity was stronger at post-test. The results of the pre-test and the post-test were tested via a t-test. The t-test results revealed that the differences between the two assessments were statistically significant at an alpha value of 0.05 (t= 3.556; df=50; p <0.05). The null hypothesis, which predicted that there would be no difference in the performance between the two assessments was therefore rejected. This implies that the translanguaging techniques were effective in inducing the participants' ability to draw inferences when reading the English additional language texts.

With regards to the first control group ***(Group C)***, the participants obtained a mean score of 1.87 with a standard deviation of 1.57 in the pre-test, and 2.01 with a standard deviation of 1.95 in the post-test. With the post-test mean score higher than that of the pre-test, the results indicated some improved performance on the participants. Furthermore, the dispersion levels in both tests were lower than the mean score, which indicated that the group was homogenous. When the two tests were measured via a t-test, the results reflected a statistically non-significant difference between the two at an alpha value of 0.05 (t= 1.447; df=29; p >0.05). The null hypothesis which predicted that there would be no difference in the performance between the two tests was, therefore, accepted. This also implies that the difference in the performance between the two assessments should be viewed with caution since there might be a shadow on the researcher's overall results.

A t-test was run to measure the level of variability between the first experimental ***(Group A)*** and the first control ***(Group C)*** groups. The results reflected that the two groups were not statistically significant at an alpha value of 0.05 (t= 0.629; df= 30; p= >0.05). This implies that the null hypothesis which predicted that there would be no difference between the two groups regardless of the intervention was therefore confirmed.

An analysis was also run between the second experimental ***(Group B)*** and the second control ***(Group D)*** groups. The table below shows the results of the two groups.

Table 4.3 E: Drawing inferences in English - Post-test results

	Experimental Group B	Control Group D
Mean	1.30	3.30
N	30	30
Std. Deviation	1.12	1.82
t-test & p value	t= 3.071; df= 29; p <0.05	

Concerning the groups that did not write the pre-test, which were the second experimental ***(Group B)*** and the second control ***(Group D)*** groups, the results indicated that the second

experimental group ***(Group B)*** obtained a mean score of 1.30 with a standard deviation of 1.12, while the second control group ***(Group D)*** obtained a mean score of 3.30 with a standard deviation of 1.82. Each group was found to be homogenous since the standard deviation for each was lower than its mean. However, the second control group ***(Group D)*** performed better than the second experimental hence the mean of the former is higher. A t-test measuring the variability between the two groups was run. The t-test results reflected a statistically significant correlation between the two groups at an alpha value of 0.05 ($t= 3.071$; $df= 29$; $p <0.05$). Unlike what was found in the first experimental ***(Group A)*** and the control ***(Group C)*** groups with regards to English, the null hypothesis which predicted that there would be no difference between the two groups due to the intervention was therefore rejected.

A One-Way ANOVA was run on the post-test scores obtained from the four groups (i.e. ***groups A, B, C, & D***) to measure the significance of the variance between the four groups' performances on the ability to draw inferences in English. The table below shows the results of the ANOVA in which variance in performance within each of the groups that wrote the pre-test and the post-test (i.e. ***groups A & C***), and between the four groups was measured.

Table 4.3 F: ANOVA results on the ability to draw inferences in English

	SS	Df	MS	F	P
Between-treatments	44.1505	3	14.7168	F = 4.06604	.007809
Within-treatments	745.6067	206	3.6194		
Total	789.7571	209			

The results of the ANOVA displayed an f-ratio value of 4.06604, and a p-value of .007809. Therefore, the differences in the performance between the four groups were statistically significant at an alpha value of 0.05. ($f = 4.06604$; $df = 3$; $p <0.05$). Thus, the null hypothesis which predicted that there would be no difference in the performance between the four groups was rejected.

4.3.3 A comparison of the ability to draw inferences between English and IsiXhosa

To refine the extent of the influence of translanguaging on drawing inferences, the scores of the first and the second experimental groups were combined to form a grand score, and further analyses were conducted on them. The same was done with the control group scores. Table 4.3 G below displays the post-test results in which the two languages were compared within each of the groups.

Table 4.3 G: A comparison of the ability to draw inference between English and IsiXhosa

	Experimental groups		Control groups	
	Xhosa	English	Xhosa	English
Grand mean	4.51	2.04	4.19	2.57
N	148	149	67	61
Std. Deviation	1.71	1.97	1.85	1.83

The table above shows that the participants in the experimental groups scored a grand mean of 4.51 with a standard deviation of 1.71 in IsiXhosa, whereas they obtained a grand mean score of 2.04 with a standard deviation of 1.97 in English. It is worth noting that the grand mean in IsiXhosa (4.51) is higher than that of English (2.04). With regards to the control groups, the table shows that the groups obtained a grand mean score of 4.19 with a standard deviation of 1.85 in IsiXhosa, while their grand mean was 2.57 with a standard deviation of 1.83 in English. As it was the case with the experimental group, the grand mean in IsiXhosa (4.19) is higher than that of English (2.57).

With the standard deviations lower than their respective grand means in both languages, the participants in both sets of groups were fairly homogenous at post-test. However, the level of homogeneity was stronger in IsiXhosa than it was in English, since the standard deviation in IsiXhosa was the furthest from its grand mean. With a higher grand mean and a stronger level of homogeneity, the results show that the participants in both the experimental and the control groups performed better in isiXhosa than they did in English when it comes to

drawing inference when reading texts; yet, both fall below the international benchmark of 75%.

The scores obtained in each language were tested via a t-test to measure the variability between the two sets of groups. The table below shows a comparison of the grand mean scores and the results of the t-test on the ability to draw inferences between the experimental and control groups for IsiXhosa.

Table 4.3 H: A comparison of the grand mean scores and p value on the ability to draw inferences in IsiXhosa

	Experimental groups	Control groups
	Xhosa	Xhosa
Grand mean	4.51	4.19
N	148	67
Std. Deviation	1.71	1.85
t-test & p value	t= 1.237; df= 213; p >0.05	

The above table shows a comparison of the grand mean scores and the results of the t-test on text the ability to draw inferences between the experimental and control groups for IsiXhosa. The t-test results revealed that the differences between the two sets were statistically non-significant at an alpha value of 0.05 (t= 1.237; df= 213; p >0.05). The null hypothesis, which predicted no variability in performance between the experimental and the control groups was therefore confirmed. This implies that with regards to drawing inferences in IsiXhosa, there was insufficient evidence that could make one attribute the difference in the performance between the two sets of groups to the translanguaging techniques employed since the difference in the performance between the two sets of groups was marginal. Furthermore, the difference in the performance between the two groups should be viewed with caution since there might be a shadow on the researcher's overall results.

The English scores were subjected to a t-test as well. The table below shows a comparison of the grand mean scores and the results of the t-test on the ability to draw inferences between the experimental and control groups for English.

Table 4.3 I: A comparison of the grand mean scores and p value on the ability to draw inferences in English

	Experimental groups	Control groups
	English	English
Grand mean	2.04	2.57
N	149	61
Std. Deviation	1.97	1.83
t-test & p value	t= 1.862; df = 208; p >0.05	

The above table shows a comparison of the grand mean scores and the results of the t-test on text the ability to draw inferences between the experimental and control groups for English. The results of the test indicated that the differences in performance between the two sets were statistically non-significant at an alpha value of 0.05 (t= 1.862; df = 208; p >0.05). In this regard, the null hypothesis which had predicted that there would be no difference in the performance between the two sets regardless of the intervention was, therefore, confirmed. Thus, there was no sufficient evidence that could make the difference in the performance as far as drawing inferences in English was concerned attributable to the intervention. Furthermore, the fact that the t-test results came out non-significant means that the difference in the performance between the two assessments should be viewed with caution since there might be a shadow on the researcher's overall results.

At face value - looking at a higher grand mean and a stronger level of homogeneity - the results show that the participants in the experimental groups performed better in one language than they did in the other when it comes to drawing inferences. To consolidate this assumption, the scores of the experimental groups were subjected to further t-test to measure the extent of the difference in the performance between the first additional language and the home language. The table below shows a comparison of the grand mean scores and the

results of the t-test of the experimental group on the ability to draw inferences between IsiXhosa and English.

Table 4.3 J: A comparison of the grand mean scores and p value on the ability to draw inferences between IsiXhosa and English

	Experimental groups	
	Xhosa	English
Grand mean	4.51	2.04
N	148	149
Std. Deviation	1.71	1.97
t-test & p value	t =11.610; df =295; p <0.05	

The above table compares the grand mean scores and the results of the t-test of the experimental group on text recall ability between IsiXhosa and English. The results indicated a statistically significant difference between the languages at an alpha value of 0.05 (t =11.610; df =295; p <0.05). Thus, the null hypothesis which had predicted that there would be no difference in the performance between the two languages regardless of the intervention was rejected. This means that as far as the ability to draw inferences was concerned, translanguaging techniques were more effective in IsiXhosa than they were in English.

4.3.4 The effects of translanguaging techniques on the ability to draw inferences

The results in this regard showed a positive correlation between the translanguaging techniques and learner performance on the ability to draw inferences. It was observed that the readers' familiarity with the text type and the content aids their comprehension, in particular their inferential understanding which results from knowledge-driven processes, as also provided in Alptekin and Ercetin (2011), while vocabulary knowledge enhances their ability to express their thoughts. The results are consistent with Mgijima and Makalela's (2016)

findings in which it was observed that translanguaging techniques enhanced grade 4 learners' ability to apply background knowledge and draw inferences when reading narrative texts. It is noteworthy that Mgijima and Makalela (2016) was a publication that came out of this study. However, this study differs from Mgijima and Makalela's (2016) publication in that theirs focused on the effects of translanguaging on the ability to draw inferences only, while the current study focused on a number of reading comprehension skills at a go, which happen to include the ability to draw inferences. By making learners draw inferences when reading texts, teachers can help improve reading abilities of struggling readers who are often passively listen to stories being read to them during a reading class, or spend most of their time merely answering the teachers' 'comprehension' questions.

4.4 The ability to make predictions

4.4.1 Making predictions in IsiXhosa

The participants in the first experimental ***(Group A)*** and the control ***(Group C)*** groups were assessed on their ability to make plausible predictions on how the events might unfold in the texts they read. For IsiXhosa home language, the post-test results indicated an improved performance for the two groups. The participants in the first experimental group ***(Group A)*** displayed much more improvement than those in the control. The descriptive measures of central tendencies and dispersion of the results of this assessment are presented in table 15 below:

Table 4.4 A: Making predictions in IsiXhosa

	Experimental Group A		Control Group C	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Mean	1.48	1.64	1.13	1.20
N	54	50	32	35
Std. Deviation	0.64	0.63	0.94	0.83
t-test & p value	t= 1.420; df=49; p >0.05		t= 0.296; df=23; p >0.05)	
	t= 4.116; df= 31; p <0.05			

The table above displays the mean scores of the participants from the first experimental group ***(Group A)*** and the first control group ***(Group C)*** on their ability to make predictions on how the events would unfold when reading texts in IsiXhosa home language. It shows that the participants in the first experimental group ***(Group A)*** obtained a mean score of 1.48 and a standard deviation of 0.64 in the pre-test, and 1.64 with a standard deviation of 0.63 in the post-test. With the standard deviation lower than the mean for each assessment, the level of homogeneity with regards to the ability to make predictions on how the events would unfold when reading texts in IsiXhosa was strong both at pre-test and post-test. In other words, the scores of most of the participants could be located around a central point. At face value, the mean scores of the two tests show that the participants performed even better in the post-test than they did in the pre-test. To verify this assumption, the pre- and post-test scores were run in a t-test. The results of the t-test reflected a statistically non-significant difference at an alpha value of 0.05 (t= 1.420; df=49; p >0.05). In other words, even though there is some difference between the mean scores of the pre- and the post-test, within this group, the difference is too marginal to be considered statistically existent. Therefore, this accepts the null hypothesis which posited that performance of the participants on making plausible predictions regarding the events in the text would remain the same regardless of the intervention. This also implies that the difference in the performance between the two assessments should be viewed with caution since there might be a shadow on the researcher's overall results.

With regards to the first control group ***(Group C)***, the table shows that the group obtained a mean of 1.13 with a standard deviation of 0.94 in the pre-test, and 1.20 with a standard deviation of 0.83 in the post-test. Since the mean score for each assessment was higher than its standard deviation, the group was deemed homogenous. The results of the t-test reflected that the difference between the pre-test and the post-test was statistically non-significant at an alpha value of 0.05 ($t= 0.296$; $df=23$; $p >0.05$). This, therefore, accepts the null hypothesis which posited that performance of the participants on the ability to make predictions would remain the same between the pre-test and the post-test. This also implies that the difference in the performance between the two assessments should be viewed with caution since there might be a shadow on the researcher's overall results.

The post-test scores of the first experimental ($M= 1.64$; $SD= 0.63$) and the first control ($M= 1.20$; $SD= 0.83$) groups were tested via a t-test to measure their variability. The results revealed that the differences between the two groups were statistically significant at an alpha value of 0.05 ($t= 4.116$; $df= 31$; $p <0.05$). The null hypothesis, which predicted no variability between the two groups was therefore rejected.

An analysis was also run between the second experimental ***(Group B)*** and the second control ***(Group D)*** groups. The table below shows the results of the two groups.

Table 4.4 B: Making predictions in IsiXhosa post-test

	Experimental Group B	Control Group D
Mean	0.88	1.33
N	24	98
Std. Deviation	0.90	0.77
t-test & p value	t= 1.390; df= 34; p >0.05	

Concerning the groups that wrote the post-test only, the second experimental ***(Group B)*** and the second control ***(Group D)*** groups, it was observed that the second experimental group obtained a mean score of 0.88 and a standard deviation of 0.90, while the second control

obtained a mean score of 1.33 and a standard deviation of 0.77. The second control group ***(Group D)*** performed better than the second experimental ***(Group B)*** since its mean was higher. The scores of the two groups were tested via t-test. The t-test results of the two groups indicated a statistically non-significant difference at an alpha value of 0.05 (t= 1.390; df= 34; p >0.05) and, therefore, accepts the null hypothesis. This also implies that the difference in the performance between the two groups should be viewed with caution since there might be a shadow on the researcher's overall results.

A One-Way ANOVA was run on the post-test scores obtained from the four groups (i.e. ***groups A, B, C, & D***) to measure the significance of the variance between the four groups' performances on making predictions on how the events would unfold when reading texts in IsiXhosa. The table below shows the results of the ANOVA in which variance in performance within each of the groups that wrote the pre-test and the post-test (i.e. ***groups A & C***), and between the four groups was measured.

Table 4.4 C: ANOVA Results on making predictions in IsiXhosa

	SS	df	MS	F	P
Between-treatments	6.6662	3	2.2221	F = 3.65804	.013319
Within-treatments	128.171	211	0.6074		
Total	134.8372	214			

The results of the ANOVA displayed an f-ratio value of 3.65804, and a p-value of .013319. Therefore, the differences in the performance between the four groups were statistically significant at an alpha value of 0.05. (f = 3.65804; df = 3; p <0.05). Thus, the null hypothesis which predicted that there would be no difference in the performance between the four groups was rejected.

4.4.2 Making predictions in English

Concerning English first additional language, the post-test results indicated improved performance on the first experimental ***(Group A)*** and the control ***(Group C)*** groups. The

descriptive measures of central tendencies and dispersion of the results of this assessment are presented in table 18 below:

Table 4.4 D: Making predictions in English

	Experimental Group A		Control Group C	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Mean	0.51	0.94	0.58	1.33
N	51	54	31	30
Std. Deviation	0.86	0.90	0.96	1.12
t-test & p value	t=2.079; df=50; p <0.05		t= 0.297; df=29; p >0.05	
	t= 2.232; df= 30; p= <0.05			

The above table shows the mean scores of the participants from the first experimental group ***(Group A)*** and the first control group ***(Group C)*** on text their ability to make predictions on how the events would unfold when reading texts in English first additional language. The table shows that the participants in the first experimental group ***(Group A)*** obtained a mean score of 0.51 with a standard deviation of 0.86 in the pre-test, and 0.94 with a standard deviation of 0.90 in the post test. The table also indicates that the group was not homogenous at pre-test, hence the mean was higher than the standard deviation. The post-test results of the first experimental group ***(Group A)*** showed some improved performance since the mean score of the post-test was higher in the pre-test and the standard deviation was lower than the mean. The differences between the pre-test and the post-test results were tested via a t-test. The results revealed that the differences between the two assessments were statistically significant at an alpha value of 0.05 (t=2.079; df=50; p <0.05). The null hypothesis, which predicted that there would be no difference in the performance between the two assessments was therefore rejected. This implies that the translanguaging techniques were effective in inducing the participants' ability to make predictions on how the events would unfold when reading texts in English additional language.

With regards to the first control group ***(Group C)***, the participants obtained a mean score of 0.58 with a standard deviation of 0.96 in the pre-test, and 1.33 with a standard deviation of 1.12 in the post-test. The post-test results indicated some improvement on the performance of the participants since the mean of the post-test was higher. Furthermore, the dispersion level for each test was lower than its mean score, which indicated that the group was homogenous. The results of the two assessments were measure in a t-test. The results of the t-test reflected a statistically non-significant difference between the pre-test and the post-test at an alpha value of 0.05 (t= 0.297; df=29; p >0.05). Therefore, the null hypothesis, which predicted that there would be no difference in the performance between the two tests was confirmed. This implies that the difference in the performance between the two assessments should be viewed with caution since there might be a shadow on the researcher's overall results.

The results of the first experimental (M= 0.94; SD= 0.90) and the first control (M= 1.33; SD= 1.12) groups, the groups that had attempted a pre- and a post-test, were analysed to measure the level of comparability. To this effect, a t-test was run. The results reflected that the two groups were statistically significant at an alpha value of 0.05 (t= 2.232; df= 30; p= <0.05). This implies that the null hypothesis which predicted that there would be no difference between the two groups regardless of the intervention was rejected.

An analysis was also run between the second experimental ***(Group B)*** and the second control ***(Group D)*** groups. The table below shows the results of the two groups.

Table 4.4 E: Making predictions in English - post-test

	Experimental Group B	Control Group D
Mean	0.67	0.42
N	30	95
Std. Deviation	0.80	0.74
t-test & p value	t= 4.356; df= 29; p <0.05	

Concerning the groups that did not write the pre-test, which were the second experimental ***(Group B)*** and the second control ***(Group D)*** groups, the results indicated that the second

experimental group ***(Group B)*** obtained a mean score of 0.67 with a standard deviation of 0.80, while the second control group ***(Group D)*** obtained a mean score of 0.42 with a standard deviation of 0.74. Each group was deemed heterogeneous since the standard deviation for each was higher than the mean. However, the second experimental group ***(Group B)*** performed better than the second control ***(Group D)*** hence the mean of the former is higher. The t-test results of the two groups reflected a statistically significant difference between the two groups at an alpha value of 0.05 ($t= 4.356$; $df= 29$; $p <0.05$). Therefore, the null hypothesis which predicted that there would be no difference between the two groups due to the intervention was rejected.

A One-Way ANOVA was run on the post-test scores obtained from the four groups (i.e. ***groups A, B, C, & D***) to measure the significance of the variance between the four groups' performances on the ability to make predictions on how the events would unfold when reading texts in English. The table below shows the results of the ANOVA in which variance in performance within each of the groups that wrote the pre-test and the post-test (i.e. ***groups A & C***), and between the four groups was measured.

Table 4.4 F: ANOVA results on the ability to make predictions in English

	SS	df	MS	F	P
Between-treatments	23.0747	3	7.6916	F = 10.01516	.00001
Within-treatments	158.2063	206	0.768		
Total	181.281	209			

The results of the ANOVA displayed an f-ratio value of 10.01516, and a p-value of .00001. Therefore, the differences in the performance between the four groups were statistically significant at an alpha value of 0.05. ($f = 10. 01516$; $df = 3$; $p <0.05$). Thus, the null hypothesis which predicted that there would be no difference in the performance between the four groups was rejected.

4.4.3 A comparison on the ability to make plausible predictions between English and IsiXhosa languages

To refine the extent of the influence of translanguaging on making plausible predictions, the scores of the first and the second experimental groups were combined to form a grand score, and further analyses were conducted on them. The same was done with the control group scores. The results each group obtained for each language were compared within and between the groups to measure the influence of translanguaging on the target ability between the two languages. Table 4.4 G below displays the post-test results in which the two languages were compared within each of the groups.

Table 4.4 G: A comparison on making predictions between English and IsiXhosa

	Experimental groups		Control groups	
	Xhosa	English	Xhosa	English
Grand mean	1.43	0.61	1.16	0.95
N	148	149	67	61
Std. Deviation	0.74	0.84	0.88	1.10

The table above shows that the participants in the experimental groups scored a grand mean of 1.43 with a standard deviation of 0.74 in IsiXhosa, whereas they obtained a grand mean score of 0.61 with a standard deviation of 0.84 in English. With regard to IsiXhosa, the grand mean (1.43) is higher than that of English (0.84). The standard deviation is lower than its grand mean in IsiXhosa while it is higher than the grand mean in English. This suggests that the participants in the experimental groups were fairly homogenous in their home language while heterogenous in their first additional language. With regards to the control groups, the table shows that the groups obtained a grand mean score of 1.16 with a standard deviation of 0.88 in IsiXhosa, while their grand mean was 0.95 with a standard deviation of 1.10 in English. As observed in the experimental groups, the grand mean in IsiXhosa (1.16) is higher than that of English (0.95). The standard deviation is lower than its grand mean in IsiXhosa while it is higher than the grand mean in English. This suggests that the participants in the

experimental groups were fairly homogenous in home language while heterogenous in first additional language.

The results show that the level of homogeneity was stronger in IsiXhosa than it was in English for both the experimental and the control groups, since the standard deviations in IsiXhosa were the furthest from their grand means. With the highest grand mean and much stronger level of homogeneity of the two, the participants in the experimental groups performed better between the two group sets when it comes to making predictions; yet, still falls below the international benchmark of 75%.

The scores obtained in each language were tested via a t-test to measure the variability between the two sets of groups. The table below shows a comparison of the grand mean scores and the results of the t-test on the ability to predict text between the experimental and control groups for IsiXhosa.

Table 4.4 H: A comparison of the grand mean scores and p value on the ability to make text prediction in IsiXhosa

	Experimental groups	Control groups
	Xhosa	Xhosa
Grand mean	1.43	1.16
N	148	67
Std. Deviation	0.74	0.88
t-test & p value	t= 2.318; df= 213; p >0.05	

The above table shows a comparison of the grand mean scores and the results of the t-test on the ability to predict text between the experimental and control groups for IsiXhosa. The t-test results revealed that the differences between the two sets were statistically non-significant at an alpha value of 0.05 (t= 2.318; df= 213; p >0.05). The null hypothesis, which predicted no variability in performance between the experimental and the control groups was therefore confirmed. This implies that with regards to IsiXhosa, there was insufficient

evidence for one to attribute the difference in the performance to the translanguaging techniques employed. Furthermore, the fact that the t-test results came out non-significant means that the difference in the performance between the two sets should be viewed with caution since there might be a shadow on the researcher's overall results.

The English scores too were subjected to a t-test. The table below shows a comparison of the grand mean scores and the results of the t-test on the ability to predict text between the experimental and control groups for English.

Table 4.4 I: A comparison of the grand mean scores and p value on the ability to make text prediction in English

	Experimental groups	Control groups
	English	English
Grand mean	0.61	0.95
N	149	61
Std. Deviation	0.84	1.10
t-test & p value	t= 1.159; df = 208; p >0.05	

The above table shows a comparison of the grand mean scores and the results of the t-test on the ability to predict text between the experimental and control groups for English. The results indicated that the differences in performance between the two group sets were statistically significant at an alpha value of 0.05 (t= 1.159; df = 208; p >0.05). In this regard, the null hypothesis which had predicted that there would be no difference in the performance between the two group sets regardless of the intervention was therefore rejected. Thus, the difference in the performance as far as English was concerned could be attributed to the intervention administered.

At face value - looking at a higher grand mean and a stronger level of homogeneity - the results show that the participants in the experimental groups performed better in one language

than they did on the other when it comes to predicting how the events would unfold in the text. To consolidate this assumption, the scores of the experimental groups were subjected to further t-test to measure the extent of the difference in the performance between the first additional language and the home language. The table below shows a comparison of the grand mean scores and the results of the t-test of the experimental group on the ability to draw inferences between IsiXhosa and English.

Table 4.4 J: A comparison of the grand mean scores and p value on the ability to predict text between IsiXhosa and English

	Experimental groups	
	Xhosa	English
Grand mean	1.43	0.61
N	148	149
Std. Deviation	0.74	0.84
t-test & p value	t= 8.971; df= 295; p <0.05	

The above table compares the grand mean scores and the results of the t-test of the experimental group on text recall ability between IsiXhosa and English. The results indicated a statistically significant difference between the languages at an alpha value of 0.05 (t= 8.971; df= 295; p <0.05). Thus, the null hypothesis which had predicted that there would be no difference in the performance between the two languages regardless of the intervention was rejected. This means that as far as the text prediction was concerned, translanguaging techniques were more effective in IsiXhosa than they were in English.

4.4.4 The effects of translanguaging techniques on text prediction abilities

The results exhibited better comprehension of the text and the production of more relevant predictions on how the events might unfold if the events were to change in the reading passage. The results agree with other studies on comprehension and text prediction (see Duke & Pearson, 2002) in which the learners exhibited enhanced reading performance, as a result

of which the learners could, after making predictions, read without any teacher support. It is worth noting that reading and text prediction changes as a reader gets better at reading in terms of grade levels text types. In other words, even though the strategy remains the same – that is: reading, making predictions, monitoring the predictions and revising them when necessary – a reader might need to adjust the strategy to suit the text type and the purpose for which the text is being read. According to Block and Duffy (2008), comprehension gets progressively more difficult from grade to grade, but it is because the texts become more and more complex, requiring the predicting–monitoring– repredicting cycle to be applied in more sophisticated ways involving more information, more words, more sentences, and more paragraphs.

4.5 Text reorganisation abilities

4.5.1 Text reorganisation in IsiXhosa

The participants in the experimental and the control groups were assessed on their ability to reorganise information they read from the target texts. For IsiXhosa home language, the post-test results indicated an improved performance in the first experimental group ***(Group A)*** while the control ***(Group C)*** displayed a regressed performance. The descriptive measures of central tendencies and dispersion of the results of this assessment are presented in table 22 below:

Table 4.5 A: Text reorganisation in IsiXhosa

	Experimental Group A		Control Group C	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Mean	0.57	1.38	0.25	0.22
N	54	50	24	32
Std. Deviation	0.57	0.67	0.44	0.42
t-test & p value	t= 6.824; df=49; p <0.05		t= 0.371; df=23; p >0.05	
	t= 10.609; df= 31; p <0.05			

The table above displays the mean scores of the participants from the first experimental group ***(Group A)*** and the first control group ***(Group C)*** on text reorganisation abilities in IsiXhosa home language. It shows that the participants in the first experimental group ***(Group A)*** obtained a mean score of 0.57 and a standard deviation of 0.57 in the pre-test, and 1.38 with a standard deviation of 0.67 in the post-test. This means that the participants performed even better in the post-test than they did in the pre-test. With the standard deviation lower than the mean in both cases, it was confirmed that the level of homogeneity in the group's abilities to reorganise information was strong both at the pre-test and post-test. In other words, the scores of most of the participants could be located around a central point. Furthermore, the scores obtained in the pre-test and the post-test were measured in a t-test for variability. The t-test results reflected a statistically significant difference between the two at an alpha value of 0.05 (t= 6.824; df=49; p <0.05). This rejects the null hypothesis which posited that performance of the participants on the ability to recall information would remain the same regardless of the intervention. In essence, the results show that translanguaging enhanced participants' ability to reorganise information when reading in IsiXhosa, thus improving reading comprehension.

With regards to the first control group ***(Group C)***, the table shows that the group obtained a mean of 0.25 with a standard deviation of 0.44 in the pre-test, and 0.22 with a standard deviation of 0.42 in the post-test. It is noteworthy that the participants obtained a higher mean score in the pre-test than they did in post-test. It was also noted that the dispersion levels of

the two tests remained widened in the post-test. This means that the scores of the pre-test and the post-test could not be located in the central point, which indicated that the group was not homogenous in both tests. The results of the two tests were measured in a t-test. Contrary to what was noted in the first experimental group, the results of the t-test, reflected that the difference between the pre-test and the post-test was statistically non-significant at an alpha value of 0.05 (t= 0.371; df=23; p >0.05). This, therefore, accepts the null hypothesis which posited that performance of the participants on the ability to reorganise information from reading texts would remain the same between the pre-test and the post-test. Furthermore, the fact that the t-test results came out non-significant means that the difference in the performance between the two assessments should be viewed with caution since there might be a shadow on the researcher's overall results.

The post-test results of the first experimental (M= 1.38; SD= 0.67) and the first control (M= 0.22; SD= 0.42) groups were tested via a t-test. The results revealed that the differences between the two groups were statistically significant at an alpha value of 0.05 (t= 10.609; df= 31; p <0.05). The null hypothesis, which predicted no variability between the two groups was therefore rejected. This implies, therefore, that translanguaging was effective in inducing the text reorganisation abilities of multilingual learners in IsiXhosa in grade 4.

An analysis was also run between the second experimental ***(Group B)*** and the second control ***(Group D)*** groups. The table below shows the results of the two groups.

Table 4.5 B: Text reorganisation in IsiXhosa - post-test

	Experimental Group B	Control Group D
Mean	1.33	0.71
N	98	35
Std. Deviation	0.77	0.71
t-test & p value	t= 4.564; df= 34; p >0.05	

Concerning the groups that wrote the post-test only, the second experimental ***(Group B)*** and the second control ***(Group D)*** groups, it was observed that the second experimental group ***(Group B)*** obtained a mean score of 1.33 and a standard deviation of 0.77, while the second control ***(Group D)*** obtained a mean score of 0.71 and a standard deviation of 0.71. With the dispersion levels far lower than the mean, the second experimental group ***(Group B)*** was found to be more homogenous than the second control group ***(Group D)***. The t-test results which measured the difference of performance between the two groups indicated a statistically significant difference (t= 4.564; df= 34; p >0.05) at an alpha value of 0.05 and, therefore, rejects the null hypothesis. Thus, concerning text reorganisation ability, the participants in the second experimental group ***(Group B)*** demonstrated relatively better performance than those in the control, which affirms the effectiveness of translanguaging on the participants' ability to reorganise information when reading in IsiXhosa.

A One-Way ANOVA was run on the post-test scores obtained from the four groups (i.e. ***groups A, B, C, & D***) to measure the significance of the variance between the four groups' performances on text reorganisation ability in IsiXhosa. The table below shows the results of the ANOVA in which variance in performance within each of the groups that wrote the pre-test and the post-test (i.e. ***groups A & C***), and between the four groups was measured.

Table 4.5 C: ANOVA results on text reorganisation in IsiXhosa

	SS	df	MS		P
Between-treatments	38.8667	3	12.9556	*F* = 26.81531	.00001
Within-treatments	101.9426	211	0.4831		
Total	140.8093	214			

The results of the ANOVA displayed an f-ratio value of 26.81531, and a p-value of .00001. Therefore, the differences in the performance between the four groups were statistically significant at an alpha value of 0.05. (f = 26.81531; df = 3; p <0.05). Thus, the null hypothesis which predicted that there would be no difference in the performance between the four groups was rejected.

4.5.2 Text reorganisation in English

Concerning English first additional language, the post-test results indicated some improved performance on the first experimental group ***(Group A)*** while the performance in the first control group ***(Group C)*** regressed. The descriptive measures of central tendencies and dispersion of the results of this assessment are presented in table 25 below:

Table 4.5 D: Text reorganisation in English

	Experimental Group A		Control Group C	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Mean	0.18	0.54	0.67	0.06
N	51	54	30	31
Std. Deviation	0.39	0.66	0.80	0.25
t-test & p value	t= 3.050; df=50; p <0.05		t= 4.039; df=29; p <0.05	
	t= 1.958; df= 31; p= <0.05			

The above table shows the mean scores of the participants from the first experimental group ***(Group A)*** and the first control group ***(Group C)*** on text reorganisation abilities in English first additional language. The table shows that the participants in the first experimental group ***(Group A)*** obtained a mean score of 0.18 with a standard deviation of 0.39 in the pre-test, and 0.54 with a standard deviation of 0.66 in the post test. With the post-test mean score higher than that of the pre-test, the results indicated an improved performance on the participants. However, with the mean score lower than the standard deviation, the group was found to be heterogeneous at pre-test and post-test. The results of the pre-test and the post-test were tested via a t-test. The t-test results revealed that the differences between the two assessments were statistically significant at an alpha value of 0.05 (t= 3.050; df=50; p <0.05). The null hypothesis, which predicted that there would be no difference in the performance between the two assessments was therefore rejected. This implies that the translanguaging techniques

were effective in inducing the participants' ability to reorganise information read from English additional language texts, even though the group remained heterogeneous in this ability.

With regards to the first control group ***(Group C)***, the participants obtained a mean score of 0.67 with a standard deviation of 0.80 in the pre-test, and 0.06 with a standard deviation of 0.25 in the post-test. With the post-test mean score lower than that of the pre-test, the results indicated a regressed performance on the participants. Furthermore, the dispersion levels in both tests were higher than the mean score, which indicated that the group was heterogeneous. When the two tests were measured via a t-test, the results reflected a statistically significant difference between the two at an alpha value of 0.05 ($t= 4.039$; $df=29$; $p <0.05$). Therefore, the null hypothesis, which predicted that there would be no difference in the performance between the two tests was rejected.

A t-test was run to measure the significance levels of the difference between the first experimental ***(Group A)*** and the control ***(Group C)*** groups. The results reflected that the two groups were not statistically significant at an alpha value of 0.05 ($t= 1.958$; $df= 31$; $p= <0.05$). This implies that the null hypothesis which predicted that there would be no difference between the two groups regardless of the intervention was therefore confirmed.

An analysis was also run between the second experimental ***(Group B)*** and the second control ***(Group D)*** groups. The table below shows the results of the two groups.

Table 4.5 E: Text reorganisation in English - post-test

	Experimental Group B	Control Group D
Mean	0.44	0.67
N	95	30
Std. Deviation	0.68	0.71
t-test & p value	t= 1.469; df= 29; p >0.05	

Concerning the groups that did not write the pre-test, which were the second experimental ***(Group B)*** and the second control ***(Group D)*** groups, the results indicated that the second experimental group ***(Group B)*** obtained a mean score of 0.44 with a standard deviation of 0.68, while the second control group ***(Group D)*** obtained a mean score of 0.67 with a standard deviation of 0.71. Each group was found to be heterogeneous since the standard deviation for each was higher than its mean. Furthermore, the second control group ***(Group D)*** performed better than the second experimental hence the mean of the former is higher. A t-test measuring the variability between the two groups was run. The t-test results reflected a statistically non-significant correlation between the two groups at an alpha value of 0.05 ($t= 1.469$; $df= 29$; $p >0.05$). Therefore, as it was the case with the first experimental ***(Group A)*** and the control ***(Group C)*** groups with regards to English, the null hypothesis which predicted that there would be no difference between the two groups due to the intervention was confirmed. However, the fact that there was a difference in the performance between the two groups should be viewed with caution since there might be a shadow on the researcher's overall results.

A One-Way ANOVA was run on the post-test scores obtained from the four groups (i.e. ***groups A, B, C, & D***) to measure the significance of the variance between the four groups' performances on text reorganisation ability in English. The table below shows the results of the ANOVA in which variance in performance within each of the groups that wrote the pre-test and the post-test (i.e. ***groups A & C***), and between the four groups was measured.

Table 4.5 F: ANOVA results on text reorganisation in English

	SS	df	MS		P
Between-treatments	6.4191	3	2.1397	F = 5.28546	.001568
Within-treatments	83.3951	206	0.4048		
Total	89.8143	209			

The results of the ANOVA displayed an f-ratio value of 5.28546, and a p-value of .001568. Therefore, the differences in the performance between the four groups were statistically significant at an alpha value of 0.05. ($f = 5.28546$; $df = 3$; $p <0.05$). Thus, the null hypothesis

which predicted that there would be no difference in the performance between the four groups was rejected.

4.5.3 A comparison of text reorganisation ability between English and IsiXhosa

To define the extent of the influence of translanguaging on text reorganisation ability, the scores of the first and the second experimental groups were combined to form a grand score, and further analyses were conducted on them. The same was done with the control group scores. Table 4.5 G below displays the post-test results in which the two languages were compared within each of the groups.

Table 4.5 G: A comparison of text reorganisation ability between English and IsiXhosa

	Experimental groups		Control groups	
	Xhosa	English	Xhosa	English
Grand mean	1.34	0.48	0.48	0.36
N	148	149	67	61
Std. Deviation	0.74	0.67	0.64	0.61

The table above shows that the participants in the experimental groups scored a grand mean of 1.34 with a standard deviation of 0.74 in IsiXhosa, whereas they obtained a grand mean score of 0.48 with a standard deviation of 0.67 in English. It noteworthy that the grand mean in IsiXhosa (1.34) is higher than that of English (0.48), and that the standard deviation in English (0.67) is higher than its grand mean. Thus, a higher standard deviation in the first additional language shows that the participants in the experimental groups were heterogenous - their scores could not be located at a central point. Nonetheless, a higher mean score and a standard deviate lower than its mean in IsiXhosa indicated that the participants in the experimental groups performed relatively better and were fairly homogenous in home language.

With regards to the control groups, the table shows that the groups obtained a grand mean score of 0.48 with a standard deviation of 0.64 in IsiXhosa, while their grand mean was 0.36

with a standard deviation of 0.61 in English. Even though the grand mean in IsiXhosa (0.48) is higher than that of English (0.36), the standard deviation for each language is higher than its grand mean. This, therefore, suggests that the participants' scores for each of the languages in the control groups were dispersed far apart from each other and from the mean, which shows that the groups were heterogenous. The level of heterogeneity was stronger in English than it was in IsiXhosa, since the standard deviation in the additional language was much higher than its grand mean. That means that the performance in IsiXhosa was relatively better. Nevertheless, rearranging text information from various parts of the reading texts into a coherent whole proved to be a challenge in both languages and for both the experimental and the control groups: both groups did not performance well on the said ability. However, with a lower grand mean and a stronger level of heterogeneity in the control groups, the participants in the experimental groups did not perform as badly as those in the control when it comes to reorganising text information.

The scores obtained in the two languages were tested via a t-test to measure the variability between the two sets of groups. The table below shows a comparison of the grand mean scores and the results of the t-test on the ability to reorganise text between the experimental and control groups for IsiXhosa.

Table 4.5 H: A comparison of the grand mean scores and p value on text reorganisation ability in IsiXhosa

	Experimental groups	Control groups
	Xhosa	Xhosa
Grand mean	1.34	0.48
N	148	67
Std. Deviation	0.74	0.64
t-test & p value	t= 8.341; df= 213; p <0.05	

The above table shows a comparison of the grand mean scores and the results of the t-test on the ability to reorganise text between the experimental and control groups for IsiXhosa. The

t-test results revealed that the differences between the two sets were statistically significant at an alpha value of 0.05 (t= 8.341; df= 213; p <0.05). The null hypothesis, which predicted no variability in performance between the experimental and the control groups was therefore rejected.

The English scores too were subjected to a t-test. The table below shows a comparison of the grand mean scores and the results of the t-test on the ability to reorganise text between the experimental and control groups for English.

Table 4.5 I: A comparison of the grand mean scores and p value on the ability to reorganise text in English

	Experimental groups	Control groups
	English	English
Grand mean	0.48	0.36
N	149	61
Std. Deviation	0.67	0.61
t-test & p value	t= 1.164; df = 208; p >0.05	

The above table shows a comparison of the grand mean scores and the results of the t-test on the ability to reorganise text between the experimental and control groups for English. The results of the test indicated that the differences in performance between the two sets were statistically non-significant at an alpha value of 0.05 (t= 1.164; df = 208; p >0.05). In this regard, the null hypothesis which had predicted that there would be no difference in the performance between the two sets regardless of the intervention was, therefore, confirmed. This also implies that the difference in the performance between the two assessments should be viewed with caution since there might be a shadow on the researcher's overall results.

At face value - looking at a higher grand mean and a stronger level of homogeneity - the results show that the participants in the experimental groups performed better in one language than they did in the other when it comes to the ability to reorganise information. To

consolidate this assumption, the scores of the experimental groups were subjected to further t-test to measure the extent of the difference in the performance between the first additional language and the home language. The table below shows a comparison of the grand mean scores and the results of the t-test of the experimental group on the ability to draw inferences between IsiXhosa and English.

Table 4.5 J: A comparison of the grand mean scores and p value on the ability to predict text between IsiXhosa and English

	Experimental groups	
	Xhosa	English
Grand mean	1.34	0.48
N	148	149
Std. Deviation	0.74	0.67
t-test & p value	t= 10.611; df= 295; $p < 0.05$	

The above table compares the grand mean scores and the results of the t-test of the experimental group on text reorganisation ability between IsiXhosa and English. The results indicated a statistically significant difference between the languages at an alpha value of 0.05 (t= 10.611; df= 295; $p < 0.05$). Thus, the null hypothesis which had predicted that there would be no difference in the performance between the two languages regardless of the intervention was rejected. This means that as far as reorganising information was concerned, translanguaging techniques were more effective in IsiXhosa than they were in English.

4.5.4 The effects of translanguaging techniques on text reorganisation abilities

The results reflected that learners' scores improved at the end of the intervention. However, of all the reading skills investigated in this study, learner performance improved less in text reorganisation than it did in the other observed skills. This means that the ability to write

summaries is a cognitively demanding task, hence the relatively deficient learner performance on writing summaries. Summary writing ranks higher on the order of cognitive abilities in Bloom's taxonomy. It requires a reader to have sufficient lexicosemantic and morphosyntactic knowledge of the target language, and to engage constructive text processing skills like inference generation and predicting the implications of facts in the reading text. In grade 4, learners are still at the elementary stages of acquiring the additional language and, in some cases, the so-called home language; and therefore, have not yet established a solid linguistic arsenal from which to draw when attempting to clearly express thoughts. Nonetheless, the groups that received the translanguaging intervention, which were the first and the second experimental groups, displayed improved performance in text reorganisation due to the intervention.

The findings in this study, on the one hand, corroborates findings in Ngcobo and his colleagues (2016) in which they incorporated translanguaging techniques to develop summary writing skills of English second language undergraduates. The learners were asked to reflect on the reading-writing techniques in which they had been asked to read a text in one language and produce a written response to the text in another. The findings reflected the learners' positive reflections about the translanguaging approach. Therefore, one may conclude that positive results are yielded when translingual techniques are engaged when teaching text reorganising skills. On the other hand, the findings seem to contradict what has often been assumed about grade 4 learners: that all that the learners could do well was to simply bark the text (Makalela & Fakude, 2014) and could not deal with questions asked in the PIRLS, which, as it is claimed, required higher order thinking skills more so than text decoding (Janks, 2011; Howie, et al., 2012; Howie, et al., 2017). The findings in this study show that the learners' critical thinking skills are reaped when translingual techniques are harnessed.

4.6 Findings incidental to the study

Further analysis was run on the data to assess how the participants performed in the various types of questions in the test. This section of the chapter presents the qualitative findings incidental to the study. To this effect, 32 (16 for IsiXhosa and 16 for English) post-test scripts were randomly selected from each of the groups that participated in the study.

The results revealed that the participants performed fairly well in multiple choice questions and in questions in which they were required to locate and retrieve information from the text. Providing interpretations or integrating ideas and information from various parts of the texts proved a challenge for many participants, though. Furthermore, a qualitative analysis of some of the test scripts reflected that a number of learners still struggled with making sense of the written words. The excerpt below (figure 2) shows an instances where a learner quoted directly what they had underlined from the reading text, even though there was no instruction to that effect.

Figure 2. Learner responses to a question on drawing inference

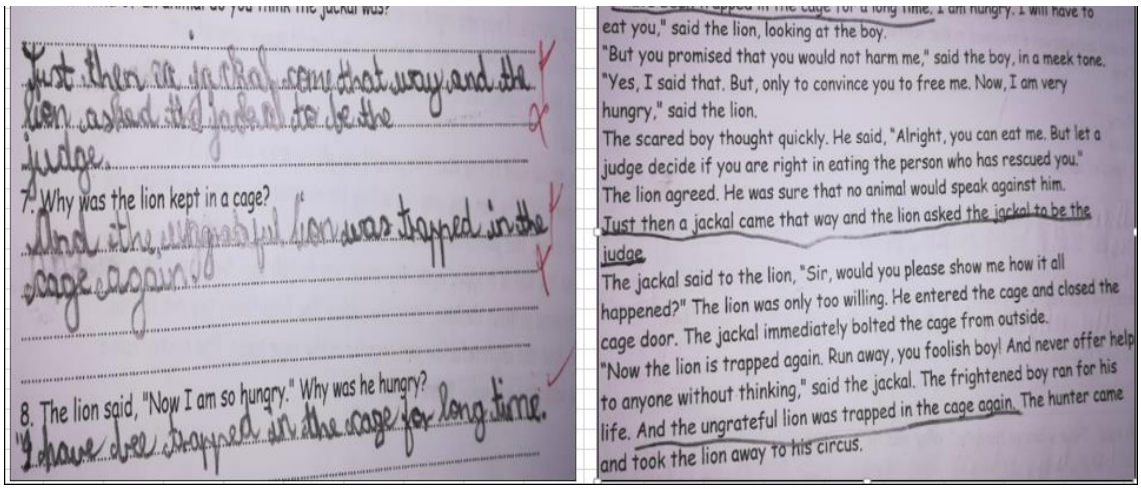


Figure 2 indicates that the learner does not have the requisite knowledge to enable them to respond to the questions accordingly. In the excerpt (figure 2), the learner's response to numbers 6 and 7 (on the left) clearly show that the learner did not understand the question at all. Instead, they rewrote what they had underlined (on the right) from the reading text. The learner's responses show that they inadvertently reproduced sentences from the reading text without understanding the question. This clearly shows lack of reading comprehension and gross inability to express themselves in a second language.

For reading comprehension strategies to be effective, the text and the reader's knowledge of the word, the world and the language ought to match. However, when learners have no basic decoding skills, it may be impossible to inculcate reading comprehension skills like predicting, inferencing, and summarising. Comprehension is blocked from the word go by the reader's lack of the requisite basic decoding skills before other reading comprehension

strategies like the use relevant background, and pragmatic knowledge even come to the fore. Thus, without the word recognition abilities, like phonemic aware and decoding, it is unlikely that a learners can comprehend texts. In order to apply reading comprehension strategies, certain basic reading processes must be automatized to free up resources for more demanding higher level processes. According to O'Reilly and Sheehan (2009), when basic reading skills are lacking, they draw valuable resources from the higher level processes that demand them. Therefore, without adequate foundation, the significance of teaching further reading comprehension skills become inconsequential. Any attempts by a teacher to teach further reading comprehension strategies can only lead to the Matthew effect.

As much as the role of one's early reading ability can be acclaimed, it has to be noted that various other factors may hinder one's opportunity to learn to read at an early age. For instance, the 2011 ANA shows that learners in the poorest schools performed the worst in the assessments in both literacy and numeracy (DoE, 2011c). It is noteworthy that some problems concerning learner performance can be attributed to discontinuities between a learner's home and the school. Each learner comes to school differentially prepared and, therefore, experiences school differently which may result in success for some and failure for others (Harkness, et al., 2005; Hull & Schultz, 2001). The less fortunate learners whose home environment is not assisting, and whose parents do not have the financial muscle to support their child to be able to read, may have a detrimental effect. As observed in Stanovich (1986), "…less healthy organisms grow up in impoverished environments. Biologically unlucky individuals are provided with inferior social and educational environments, and the winners of the biological lottery are provided better environments" (p. 383). This implies that learners who are from homes where a lot of reading takes place (e.g. where parents are educated) are highly likely to thrive in their reading ability at school. This, in addition to individual differences in reading abilities, can be a contributory factor towards the widening gap as good readers get better and better while the poor readers get poorer in South Africa.

While many learners simply rewrote the sentence that mentioned the word '*circus*' as the answer (i.e. that 'the hunter came and took the lion away to the circus' – see Appendix 3), it was clear that a number of them did not know what a circus is and/or what happens at it as observe in the excerpt below:

Figure 3. Learner responses to a text prediction question

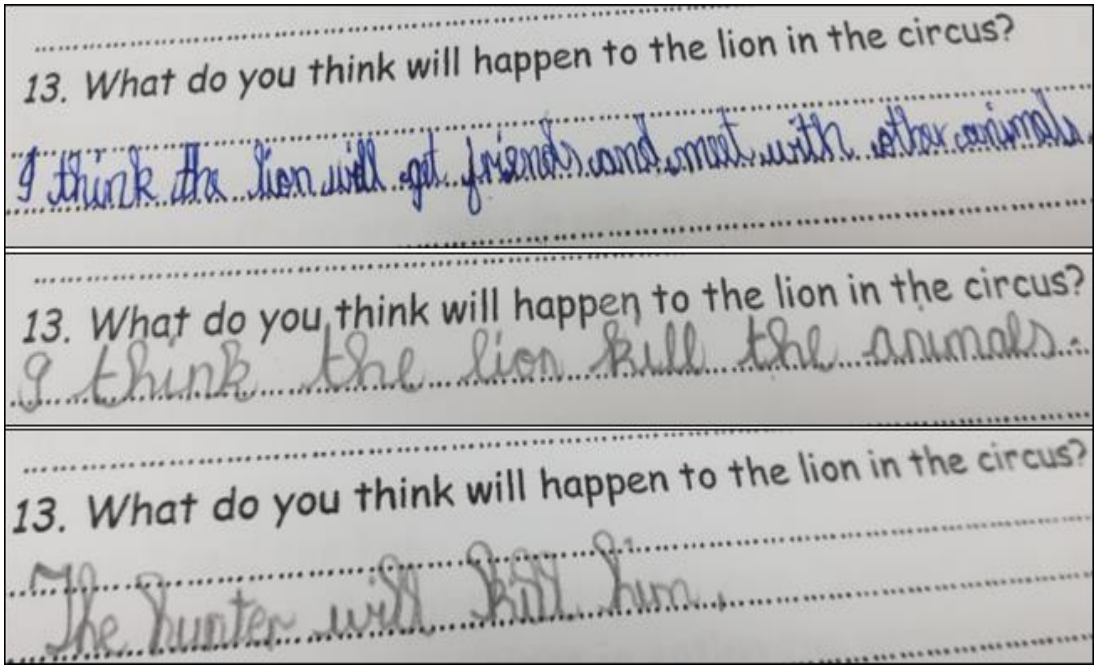


Figure 3 above shows one of the questions in which learners were required to make predictions on how the events might unfold in the story. The results of the quantitative analysis showed that the participants exhibited an improved performance with regards to text-prediction in English. However, the qualitative analysis exhibited that the responses provided by the learners show that some of the learners may have never been to or heard of what happens at a circus. As a result, their prediction on what would happen to the lion at the circus were not accurate. What has been noted in the responses in the above excerpt (Figure 3) is that the learners understood the question but could not provide the expected correct answers due to lack of adequate background knowledge. It is noteworthy that the more students' contexts of language and literacy use allow them to draw from across the whole of their backgrounds, the greater are the chances for them getting and proving the correct answers correctly. As it can be seen in the responses above, the readers' pre-existing knowledge related to the text content plays a pivotal role. Pre-existing knowledge helps readers compensate for gaps in text-based information by affording quick and relatively effortless access to relevant information in long-term memory based on incomplete text-based information as cues. There are various ways in which prior knowledge can be activated to aid a reader interact with the text and understand it better. These include asking a few questions to find out what the reader already knows about the topic and then providing the new knowledge that the reader might need (McIntyre, et al., 2011). Since this was a formal

assessment, at which a test-taker had to be silent, read on their own and attempt the test, it would be inappropriate to ask question to check if the test-takers had sufficient background knowledge about the topic of content of the text.

With regards to summarising, the qualitative analysis revealed that some participants performed fairly well when they were required to rearrange jumbled sentences into a meaningful storyline, while synthesizing ideas and information from various parts of the texts into a coherent whole proved a challenge for many. The excerpt below (Figure 4) shows one of the best responses to a question that required them to write a summary in isiXhosa.

Figure 4. Learner response to a text reorganisation question in IsiXhosa.

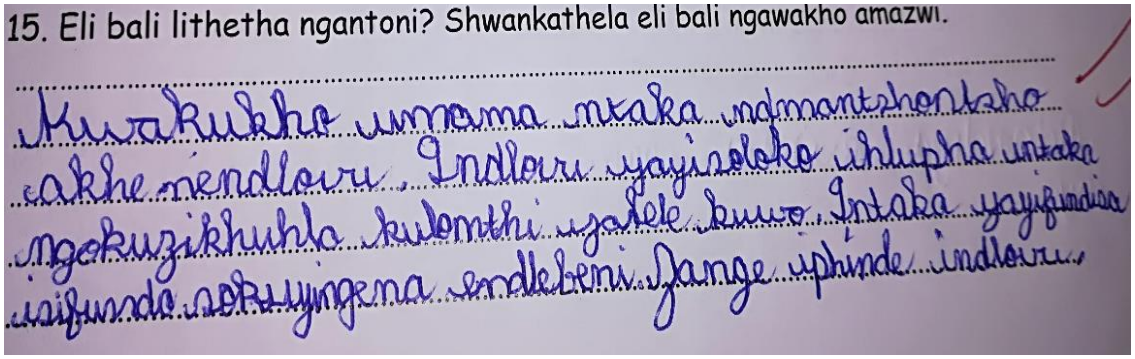


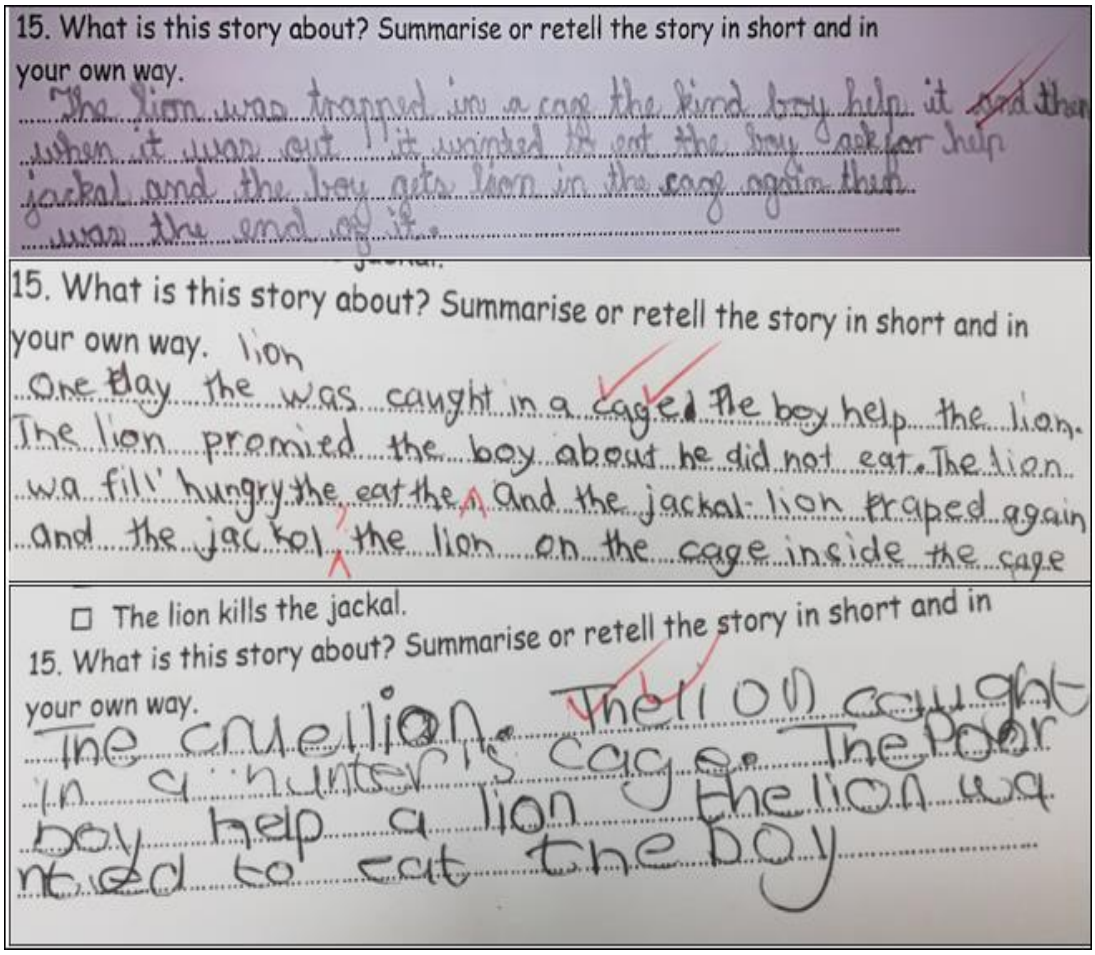
Fig 4 Translation

15. What is the story about? Summarise the story using your own words.

There was mother bird, her chicks, and an elephant. The elephant always troubled the bird by scratching his back against the tree on which the bird had built her nest. The bird taught the elephant a lesson by entering the elephant's ear. The elephant never came back again.

As far as English was concerned, the results of the qualitative analysis showed that very few test scripts displayed a comprehensive summary of the reading passage in English. While most of the learners had a hard time with writing summaries, the excerpt (Figure 5) below shows some of the best responses to a question on summary writing in English.

Figure 5. Learner responses to a text reorganisation question in English.



As it was observed in the quantitative results presented above, the overall observation on qualitative analysis reflect that the participants performed better in Home language than they did in the first additional language. The fact that most learners did not perform well in English can be attributed to a number of factors, which include the learners' lack of various abilities that are essential in reading, such as lexicosemantic and morphosyntactic knowledge of the target language. Moreover, the learners are still unable to engage constructive text processing skills like inference generation, and predicting the implications of facts in the reading text. In grade 4, learners are still at the elementary stages of acquiring the additional language and, in some cases, the so-called home language; and therefore have not yet established a solid linguistic arsenal from which to draw when attempting to clearly express thoughts. In other words, the learners have not yet reached the adequate threshold at which they can use the target language to clearly express themselves in various social and academic contexts, the Cognitive Academic Language Proficiency (CALP) (Cummins, 2005). Thus,

dealing with reading comprehension in an additional language still proves to be a challenge for learners in grade 4 irrespective of the adjusted language and the level of difficulty in the reading text.

4.7 Conclusion

The preceding chapter presents the data obtained for each of the variables investigated in the study which are text recall abilities, drawing inferences, the ability to make predictions, and text reorganisation abilities. The findings reflect a positive correlation between the translanguaging techniques employed and learner performance on the abilities investigated. That is, the learner performance improved due to the intervention. Furthermore, it has been observed that the performance improved more in the learners' home language than in their second additional language. The differential learner performance makes it hard to measure and account for their true abilities. The fact that learners did not perform as well as they did in English can be attributed to a number of factors, including that evaluating the investigated variables inevitably requires the learners to draw from the coordination of various abilities that are essential in reading, such as morphology and vocabulary knowledge. At elementary grades, the requisite skills are still lacking in the learners' additional language; more especially that learners in South Africa are taught in their home language from Grade 1 - 3, while English is introduced as a subject. It is only at Grade 4 that English starts to be used as the medium of instruction while the Mother Tongue is maintained through being learned as a subject. Thus, dealing with assessments in an additional language proves to be a challenge for the learners.

Chapter Five: Summary, conclusions, and recommendations

5.1 Introduction

The previous chapter presented the data and the findings related to the questions the study sought to answer. The findings are presented according to common patterns and themes based on the questions that guided the study. This chapter provides a summary of the study. Also covered here are the conclusions that have been drawn from the previous chapter, and the recommendation for future research.

5.2 Summary of the study

This study investigated the effects of translanguaging techniques on IsiXhosa-English bilingual grade 4 learners. It was prompted by the paucity of research that investigated alternative literacy models that are multilingual in orientation in order to deal with inadequate reading abilities at primary education levels. Thus, the study focused on the effects of the translanguaging techniques on the reading comprehension skills of the learners with regards to their ability to recall, summarise, draw inferences when reading texts, and make predictions on how the events would unfold in the texts they read.

The study adopted a Solomon Four Group quasi-experimental design. This was a pre-test:post-test experimental design which had 2 pre-tested experimental groups, one of which received a translanguaging intervention; and 2 post-tested control groups that did not write a pre-test, one of which receive a translanguaging intervention. Therefore, this design provided for 4 groups comprising 2 experimental groups and 2 control groups.

Two hundred and fifteen learners aged between 9 and 12 years from 4 different rural primary schools in Matatiele District in the Eastern Cape and their teachers participated in the study. The learners wrote a battery of tests from which the data were collected, while the teachers assisted with the administration of the intervention. The chapters contained herein have been summarised as provided below:

Chapter One stresses the need for a study of this nature by giving a detailed background to the study, in which lack of research on the use of multilingual approaches to address a reading problem at elementary grades is clearly presented. For instance, research based evidence that shows that learners at elementary grades lack adequate reading comprehension skills, as a results of which their ability to read independently and cope with subsequent academic demands gets curtailed is provided. Translanguaging, has been found to offer the opportunity to alleviate the separation of reading development according to languages in one classroom (García, 2009; Makalela & Fakude, 2014; Hornberger & Link, 2012). The chapter identifies the outstanding research gap, which is that the potential of translanguaging had not been fully exploited in the South African school setting regardless of the learners' and teachers' subtle indications of the desire to translanguage. It also highlights how the study promotes linguistic and cultural tolerance in a pluralistic society and can bring about social justice in multilingual communities. Furthermore, the chapter provides a list of questions the study intended to address, as well as an outline of the research objectives the study sought to meet, which were as follows:

- To evaluate information recall ability of the learners
- To assess how well the learners draw inferences from the texts they read
- To assess the text prediction skills of the learners
- To evaluate the learners' ability to reorganise ideas from the texts they read

In order to meet each of the objectives outlined above, the participants, 215 grade 4 IsiXhosa-English bilingual learners from four schools in Matatiele District in the Eastern Cape, wrote two sets of tests which assessed their reading comprehension skills. The first set was a pre-test while the second was a post-test in English and IsiXhosa. There were 15 comprehension check questions for each language. The questions comprised 5 multiple choice questions, 1 short answer question, 4 questions for specific answers, and 5 open ended questions. Of the 15 questions, 3 questions assessed the learner's ability to recall information; 4 assessed their text reorganisation skills; 6 assessed their critical thinking skills and how well they drew inferences from written texts; and 2 assessed their ability to make predictions on how the events might unfold in the text. All the objectives as set out this chapter were met, and the findings for each objective are presented in ***Chapter four.***

Chapter Two presents the theoretical framework and empirical research dealing with reading comprehension in more than one language. It examines the relevance of existing hypotheses, the linguistic interdependence hypothesis and the threshold hypothesis, against the suggested simultaneous use of more than one language in a reading classroom - translanguaging. Also, presented here is literature about reading comprehension on the target skills. The chapter reflects on the relevant underpinning factors that make translanguaging the most relevant pedagogy through which reading comprehension skills can be facilitated.

A distinction is drawn between translanguaging and other related terms with which translanguaging may possibly be confused. For instance, a distinction is drawn between translanguaging and code-switching in which it is shown that the former posits that bilinguals have a single integrated linguistic repertoire from which they strategically draw appropriate features to communicate effectively, whereas the latter assumes that the linguistic repertoire of a multilingual person comprises multiple separate language systems between which the speaker switches to express a thought. Furthermore, a confusion that might arise between translanguaging and translation is cleared: translanguaging is proactive while translation is reactive. In other words, translation entails reiterating what has been said albeit in a different language; whereas, translanguaging is a proactive process - a planned initiative in an academic setting that alternates the input:output languages. Unlike translation, translanguaging is intended not only to scaffold instruction and to make sense of the language of communication, but to allow multilinguals to optimally utilize their broad linguistic repertoire, and to function in the standardized academic languages required in schools.

In as much as translanguaging may differ from code-switching and translation, there are some essential common features between them with regards to language in education: the terms manifest an attempt to break away from the oneness ideologies that have dominated language education and language in education. Furthermore, the concepts constantly attempt to disrupt the notion of discrete, unitary languages by introducing pedagogies that cut through and across the pedagogical structures imposed by monolingualism and linguistic purism.

A distinction is also drawn between translanguaging and other theories of language acquisition such as the linguistic and the threshold hypotheses in the former recognises the various linguistic varieties a learner has acquired as a single repertoire which a learner utilises

to communicate. Unlike the linguistic interdependence and the threshold hypotheses which claim that the successful development of a second language at school depends on L1-L2 transfer, translanguaging advocates for the simultaneous use of the learners' tapestry of languages to acquire, construct and communicate knowledge. The linguistic and the threshold hypotheses give the impression that they assume a linear approach to language development – a skill has to be obtained in one language first and then transferred to another at a later stage. Furthermore, these hypotheses seem to engage a monoglossic approach to language acquisition in that they treat the languages in a learner's repertoire as separate and unrelated entities.

In essence, the chapter indicates that translanguaging was a preferable framework within which this study was designed.

Chapter Three explains how the data were collected and analysed. It, briefly, provides the design used in the study, which is a quasi-experimental Solomon Four Group design in which there were 4 groups comprising 2 experimental groups and 2 control groups. Four grade 4 rural schools with a total of 215 learners in Matatiele District in the Eastern Cape were selected to take part in the research. Purposive sampling was used to select the schools. First, the schools were chosen based on their shared characteristics of being in quintile 2. The schools classified as quintile 2 are mostly rural and have the learners from disadvantaged backgrounds measured by the socio-economic conditions of the surrounding communities in which the schools are situated. The chapter also provides details on how the study dealt with threats that might cast doubt to the valid and reliability of the results of the study, which included the researcher bias, the placebo effect, the carryover effect, and the maturation effect. For instance, to minimise the Hawthorne or placebo effect, which might result in improved performance by the pre-test groups due to merely taking the pre-test, the post-test results of the groups that had also taken the pre-test were measured against those of the groups that did not take the pre-test.. This also helped minimise the likelihood of a transient or carryover effect which is a lasting effect that occurs due to exposure to the initiative.

5.3 Major findings

The detailed findings of the study are provided in **Chapter 4**. They are organised according to common patterns and the target skills based on the questions that guided the study. A succinct presentation of major findings on the effects of translanguaging techniques on each variable is provided below.

Text recall abilities

With regards to the learners' ability to recall information after reading a text, the findings reflected a positive correlation between the translanguaging techniques and learner performance on the ability to recall information in IsiXhosa. That is, the learner performance improved in the learners' home language due to the intervention. However, as far as English was concerned, the results displayed regressed but statistically non-significant performance. That implies that any similar intervention strategy that seeks to emulate the procedure outlined in this study to improve text recall abilities in English among participants with characteristics similar to those of the participants of this study should be exercised with due caution.

The findings, on the one hand, are consistent with findings in other studies in which it has been observed that when learners attempt assessments in a second language, their performance tends to be lower, which makes it hard to measure and account for their true ability (Alptekin & Ercetin, 2011). On the other hand, the findings contradict some findings on the effects of translingual techniques on the recall abilities of English second or foreign language learners. For instance, Ong and Zhang (2018) investigated the effects of code-switched reading tasks on Chinese bilingual learners' vocabulary recall ability. In their study, the experimental group was provided with a reading comprehension passage consisting of unfamiliar second language target words, whose translations were either glossed in the text margin or listed at the end of the text. The results showed that the experimental group's recall scores were higher than those of the control group. Even though the findings in Ong and Zhang's (2018) and this study looked on the recall abilities of multilinguals, it is worth noting some minor differences: in the former's study the participants were undergraduates, while this study was conducted among grade 4 learners. Furthermore, the participants in Ong and

Zhang's (2018) study completed a gap-fill task, while this study required the participants to demonstrate their knowledge, firstly, by selecting the correct answers from the lists of answer options provided, and, secondly, by producing meaningful sentences in which they provided specific correct answers, albeit obtainable from the reading passage.

The fact that learners did not perform well in English can be attributed to a number of factors, which include that text recall as a comprehension skill is not only confined to simply remembering or locating information presented in the reading text. In other words, evaluating the said skill inevitably requires the learners to draw from the coordination of various abilities that are essential in reading, such as morphology and vocabulary knowledge. In grade 4, unfortunately, the requisite skills for text recall are still lacking in the learners' additional language. Thus, dealing with assessments in an additional language proves to be a challenge for grade 4 learners irrespective of the fact that the learners may have continuous access to the reading text when answering questions.

Drawing inferences

Concerning drawing inferences, it was observed that the translanguaging techniques employed were effective for both the home language and the first additional language in inducing the participants' ability to draw inferences when reading texts. It was also observed that the readers' familiarity with the text type and the content aids their comprehension, in particular their inferential understanding which results from knowledge-driven processes, while vocabulary knowledge enhances their ability to express their thoughts. Think-aloud strategies, in which the teacher vocalises his/her thinking, thus letting the learner know what s/he is thinking and how s/he is thinking about it, are preferable when attempting to harness learners' inferencing skills. To this effect, the teacher read the text aloud, paused at certain points and asked questions, answers of which could only be provided by making logical inferences, and then verbalized his thinking in order to help learners make the correct inferences. In this regard, learners are guided on how to apply prior knowledge and the facts from the text to draw the correct inferences.

The findings are consistent with Mgijima and Makalela's (2016) findings in which it was observed that translanguaging techniques enhanced grade 4 learners' ability to apply

background knowledge and draw inferences when reading narrative text. However, this study differs from Mgijima and Makalela's (2016) in that theirs focused on the effects of translanguaging on the ability to draw inferences only, while the current study focused on a number of reading comprehension skills at a go, which happen to include the ability to draw inferences. By making learners draw inferences when reading texts, teachers can help improve reading abilities of struggling readers who are often passively listen to stories being read to them during a reading class, or spend most of their time merely answering teachers' 'comprehension' questions.

The ability to make predictions

Regarding the text prediction skills, the results exhibited better comprehension of the text and the learners produced more relevant predictions on how the events might unfold in the reading passage for each language. At face value, the learners obtained better scores in IsiXhosa than in English. In other words, even though the scores were higher, the difference between IsiXhosa pre- and post- test scores of each group was too marginal and was found to statistically non-significant, whereas that of English was found to be statistically significant. That means, it can be claimed that the learner performance improves significantly in English than it could be claimed in IsiXhosa. However, the qualitative analysis exhibited that the responses provided by the learners show that some of the learners lacked sufficient background knowledge to make the correct predictions about the events in the text. Nonetheless, what could be noted in the responses was that the learners understood the question but could not provide the expected correct answers due to lack of adequate background knowledge. Thus, the readers' pre-existing knowledge related to the text content plays a pivotal role. Prior knowledge helps readers compensate for gaps in text-based information by affording quick and relatively effortless access to relevant information in long-term memory based on incomplete text-based information as cues. In order to recall read information, or make relevant predictions from a reading text, a reader relies on salient textual cues and background knowledge. Thus, reading involves deciphering a written linguistic code, meanwhile a reader also brings meaning to the text in order to make more sense out of it. Making sense of a text, requires a reader to relate the meanings of the text to what the reader already knows.

The results agree with other studies on comprehension and text prediction (see Duke & Pearson, 20024) in which the learners exhibited enhanced reading performance, as a result of which the learners could, after making predictions, read without any teacher support. It is worth noting that reading and text prediction changes as a reader gets better at reading in terms of grade levels text types. In other words, even though the strategy remains the same – that is: reading, making predictions, monitoring the predictions and revising them when necessary – a reader might need to adjust the strategy to suit the text type and the purpose for which the text is being read. According to Block and Duffy (2008), comprehension gets progressively more difficult from grade to grade, but it is because the texts become more and more complex, requiring the predicting–monitoring– repredicting cycle to be applied in more sophisticated ways involving more information, more words, more sentences, and more paragraphs.

Text reorganisation abilities

On text reorganisation ability, the findings reflected that learners' scores improved at the end of the intervention. However, of all the reading skills investigated in this study, learner performance improved less in text reorganisation than it did in the other observed skills. This shows that the ability to write summaries is a cognitively demanding task, hence the relatively deficient learner performance on writing summaries. One of reasons advanced to this effect is that at grade 4 learners are still at the elementary stages of acquiring the additional language and, in some cases, the so-called home language; and thus have not yet established a solid linguistic arsenal from which to draw when attempting to clearly express thoughts. Nonetheless, the groups that received the translanguaging intervention, which were the first and the second experimental groups, displayed improved performance in text reorganisation due to the intervention.

The findings in this study, on the one hand, corroborates findings in Ngcobo and his colleagues (2016) in which they incorporated translanguaging techniques to develop summary writing skills of English second language undergraduates. The learners were asked to reflect on the reading-writing techniques in which they had been asked to read a text in one language and produce a written response to the text in another. The findings reflected the learners' positive reflections about the translanguaging approach. Therefore, one may

conclude that positive results are yielded when translingual techniques are engaged when teaching text reorganising skills. On the other hand, the findings seem to contradict what has often been assumed about grade 4 learners: that all that the learners could do well was to simply bark the text (Makalela & Fakude, 2014) and could not deal with questions asked in the PIRLS, which, as it is claimed, required higher order thinking skills more so than text decoding (Janks, 2011; Howie, et al., 2012; Howie, et al., 2017). The findings in this study show that the learners' critical thinking skills are reaped when translingual techniques are harnessed.

5.4 Recommendations

This study has proven that translanguaging is an effective way to enhance reading comprehension. Therefore, monolingual approaches that require the use of one language at a time thus limiting multilingual learners from fully deploying their meaning-making repertoire to clearly express their thoughts should be revisited.

The richness of the linguistic diversity of multilingual learners should be utilised as a critically important resource to promote their educational success. Therefore, teacher training institutions, curriculum designers and educators in South Africa must create an enabling environment for learners to freely use their tongues and minds. It is only when the linguistic barriers are removed that bilingual education can truly enable multilingual learners to acquire knowledge and express the same using various languages and semiotic repertoires.

This study extends the bounds of research in reading literacy even further in that it attempts to alleviate the substandard reading performance in elementary grades in multilingual communities by advocating the use of 2 or more languages simultaneously in the same lesson. However, research that will look at the effects of assessments in which learners receive an input in one language and give an output in another is hereby recommended. The recommended research should also interrogate the relevance of the current state of affairs that prevents such assessments from being effected and should provide various means through which such could be achieved.

5.5 Conclusion

This study investigated the effects of translanguaging techniques on the reading abilities to bilingual IsiXhosa (L1) - English (L2) learners in Grade 4. It focused on the influence of the techniques on the learners' ability to recall information, their text reorganisation skills, and their ability to make prediction and draw inferences when reading texts. The findings demonstrated that translanguaging techniques in which two languages are used simultaneously in one lesson have a positive impact on the reading comprehension skills of the learners. The findings also indicated that reading comprehension is determined by a number of factors, which include the reader's familiarity with the content, the context of the reading text, the vocabulary used therein, and the reader's writing skills in general. Thus, the text and the reader's knowledge of the word, the world and the language ought to match. In other words, comprehension may be hampered by the reader's lack of relevant background, linguistic knowledge, or when the task demands exceed the readers' available pragmatic knowledge.

It has also been noted that at grade 4, learners are still at the elementary stages of acquiring the additional language and, in some cases, the so-called home language; thus, have not yet established a solid linguistic arsenal from which to draw when attempting to clearly express thoughts. Therefore, reading development ought to be presented in such a way that it makes sense to the learners, taking into account their age and their various semiotic repertoires. The translanguaging techniques incorporated in this study helped mitigate the slump that occurs among multilingual learners in grade 4. The techniques afforded the learners the opportunity to utilize their entire semiotic repertoire in the learning process, and in so doing, helping them become better readers. It noteworthy that explicitly teaching comprehension strategies significantly improves learners' comprehension skills. However, the need for comprehension skill and strategy instruction is not adequately attended to in the South African curriculum documents. Therefore, this study recommends that reading literacy developers (i.e. teacher training institutions, teachers, and policy makers) should consider inclusive approaches to reading literacy development in South Africa and other multilingual communities in which an enabling environment could be created for multilingual learners to freely use their tongues and minds.

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Appendices

Appendix 1 – Pre-Test English: The lion and the hare



Date:_____

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School:_____

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Translanguaging training/intervention 2017

Read the story below and then answer the questions following it.

A long time ago a lion lived in the forest, and was killing other animals without shame. The other animals were very scared because the lion could come up at any time and kill them. To stop the lion's deadly hunts, all other animals had a meeting to discuss how they could avoid being hunted. They came up with a plan that would make the lion happy. The plan was that they should take turns to provide the lion with food each day. This meant that some animals would still die, of course, but the rest would live in peace for that day. The animals told the lion about the plan. The lion agreed and enjoyed months of easy life. He did not have to hunt anymore.

One day it was the hare's turn to be the lion's food. Although small, the hare was very clever. She thought of a plan that would save herself and other animals from being eaten anymore.

She ran to the lion's den. "Lion, lion," the hare cried out as she came closer to the lion. "Help me, help me! Another lion is trying to eat me. But I am to be your dinner! You must stop him!" Furious that someone was trying to steal his food, the lion demanded, "Where is he? Take me to the thief. I will make him pay for this mischief!"

The hare and the lion walked through the forest, towards a deep well. The hare pointed at the water in the well and said, "There it is." The lion went closer to the water and looked down. He saw his own reflection in the water. Thinking he had found the animal who tried to steal his food, the lion roared loudly. He was ready to fight. He jumped into the well trying to fight what he thought was another lion. Then the hare heard the lion crying for help.

The hare went home smiling. Other animals thanked the hare for saving them from being eaten by the lion.

Questions

1. Give this story a title

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2. This story teaches us that _____. *(Mark ☑ only one sentence below)*

- ☐ When you are big, you cannot help others.
- ☐ Lions can live without eating other animals.
- ☐ The weak can sometimes defeat the strong.
- ☐ Some animals would still die.

3. Write numbers next to each of the following sentences to show the correct order of what happened in the story from the first until the last thing.

- ☐ The lion looked down and saw his own reflection in the water.
- ☐ Other animals came up with a plan to stop the lion from killing many them at once.
- ☐ The hare came up with a plan to kill the lion.
- ☐ Then other animals lived in peace.

4. Choose a sentence that shows that the lion was not afraid of other animals.

- ☐ “Take me to the thief. I will make him pay for this mischief!”
- ☐ “Help me, help me! Another lion is trying to eat me."
- ☐ The hare was very clever.
- ☐ The lion agreed and enjoyed months of easy life.

5. How many plans did the animals come up with at the meeting?

- ☐ One plan.
- ☐ Two plans.
- ☐ Three plans.
- ☐ Four plans.

6. What kind of an animal do you think the lion was?

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7. Why was the lion killing other animals?

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8. In the story, we are told that "the lion agreed and enjoyed months of the easy life." What did he agree to?

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9. How did the hare feel when it was his turn to be eaten by the lion? Why do you think he felt that way?

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10. If you were one of the animals, what would you do to stop the lion from killing others?

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11. In the story, we are told that other animals were very scared. Why were other animals so scared?

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12. If the lion were to come back again, what do you think other animals would do?

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13. What do you think will happen to the lion in the water?

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14. What happens at the end of the story?

- ☐ The lion said he was sorry for killing other animals.
- ☐ A bigger lion killed the troublesome lion.
- ☐ The lion never came back to trouble other animals again.
- ☐ The hare ate the lion.

15. What is this story about? Summarise or retell the story in short and in your own way.

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Appendix 2 – Pre-Test – IsiXhosa: Ingonyama nenkawu

Date:_____
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School:_____
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Translanguaging training/intervention 2017

Funda eli bali, uze uphendule imibuzo elandelayo.

Ingonyama nenkawu zazihlala kwihlathi elishinyeneyo. Ingonyama yayizula ihlathi lonke phantsi, lo gama inkawu yayihlala phezulu ezincotsheni zemithi. Ngenye imini ingonyama yabona iqatha lenyama libekwe phantsi kwigqabi lomthi webhanana. “Naku ukutya okusimahla nokundizele lula ndingakusebenzelanga,” yacinga njalo.

Yayingazi ukuba umzingeli wombe umngxuma onzulu waza wawugquma ngegqabi lebhanana. Emva koko wabeka inyama esazulwini segqabi lebhanana waza igqabi waligquma ngentlabathi ukuze umgibe ungabonakali.

Ingonyama yasondela embindini wegqabi lebhanana, kodwa yathi nje ukuba ilume ngamazinyo ayo, suka umhlaba wavuleka phantsi kwayo. Yatshona kuloo mngxuma unzulu ingonyama neqatha elo lenyama kunye negqabi lebhanana.

Umngxuma wawumxinwa kangangokuba ingonyama yayikwazi ukuma nkqo kuphela, imi ngemilenze yayo yangasemva. Ingonyama yazama ukuphuma kulo mngxuma unzulu, kodwa ngomtsi ngamnye umhlaba obomvu wawudilika udilizwa ziinzipho zayo ize iphinde iyokuwela ezantsi emngxunyeni.

Yathi isahleli apho kuloo mngxuma unzulu ngorhatya, idiniwe, yabona umsila ugqitha. Loo msila yayingumsila wenkawu eyayiwutsibile yona umngxuma. Ingonyama yakhwaza icela uncedo.

“Kumkani, wenza ntoni emngxunyeni onzulu nomnyama kangaka?” yayibuza ngelitshoyo inkawu, ijonge emngxunyeni.

“Ndiwele apha,” yatsho ingonyama ngelizwi elibonakalisa ukuphelelwa ngamandla. “Kudala ndilapha okoko kwakusasa. Nceda undisindise.”

Inkawu yathandabuza yaze yasuka yahamba, kodwa ingonyama yakhwaza futhi yayicenga kakhulu.

Yathi inkawu engonyameni, “Kuthiwa zonke izilwanyana ezakhe zakunceda, zange ziphile ukuze zikwazi ukubalisa elo bali.”

“Ndiyazi ukuba ukrelekrele ukuba ungakholelwa kubuxoki obuxelelwa ziintshaba zam ngam,” yatsho ingonyama, “Nceda undisindise.”

Ekugqibeleni inkawu yayisizela ingonyama yaza yafaka umsila wayo emngxunyeni ukuze usetyenziswe njengentambo. Ingonyama yabambelela kumsila wenkawu yagwencela, yenyuka yaphuma. Kodwa yathi naxa sele iphumile emngxunyeni yaqhubeka iwubambe nkqi umsila wenkawu.

“Ndiyeke! Andikuncedanga na ndakukhupha emngxunyeni onzulu njengoko ubundicelile?” inkawu yabuza ingonyama.

Kodwa ingonyama yawuqinisa ngakumbi umsila wenkawu. “Nceda undiyeke ndihambe!” yakhala inkawu.

Kodwa ingonyama yaye iwuqinisa ngakumbi umsila wenkawu.

Imibuzo

1. Sithini isihloko esilifaneleyo eli bali?

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2. Eli bali lisifundisa ntoni? Khetha isivakalisi sibe sinye ngokubeka uphawu u☑.

- ☐ Izilwanyana azincedani.
- ☐ Sukumnceda umntu ongamthembiyo.
- ☐ Ingonyama sisilwanyana esilungileyo.
- ☐ Iingonyama azibatyi abantu.

3. Bhala amanani ecaleni kwesivakalisi ngasinye, ubonakalise ukuba yintoni eyenzeka kuqala ebalini; yaza yalandelwa ngeyiphi, ngokulandelana kwazo kude kube ngeyokugqibela.

- ☐ Inkawu yayikhupha emngxunyeni ngomsila wayo.
- ☐ Ingonyama yatshona emngxunyeni onzulu.
- ☐ Ingonyama yabona iqatha lenyama.
- ☐ Ingonyama ayivumanga ukuyeka umsila wenkawu.

4. Khetha isivakalisi esibonakalisa ukuba ingonyama yayizithoba phambi kwenkawu.

- ☐ "Nceda undisindise."
- ☐ "Ndiyazi ukuba ukrelekrele ..."
- ☐ "Kudala ndilapha ..."
- ☐ "Ndiwele apha."

5. Yayitshone ngeliphi ixesha ingonyama emngxunyeni?

- ☐ Ekuseni
- ☐ Emini
- ☐ Emalanga
- ☐ Ngorhatya

6. Xa ucinga, le nkawu yayisisilwanyana esinjani?

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7. Kutheni inkawu ihlala phezulu emthini nje?

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8. Yenza njani inkawu ukuze ingonyama iphume emngxunyeni?

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9. Yayiziva njani inkawu xa ingonyama ingasafuni ukuyeka umsila wayo? Kutheni ucinga ngolo hlobo nje?

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10. Ukuba wena ubuyingonyama, ubungayiyeka inkawu ihambe? Kutheni?
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11. Yayithandabuziswa yintoni inkawu phambi kokuba incede ingonyama?
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12. Ukuba ibe ingavelanga inkawu, ucinga ukuba bekuzakwenzeka ntoni kwingonyama?
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13. Xa ucinga, kwagqibela kwenzeke ntoni phakathi kwenkawu nengonyama?
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14. Eli libali liphela njani?

- ☐ Ingonyama uyafa.
- ☐ Inkawu iyafa.
- ☐ Ingonyama ayivumi ukuyeka umsila we nkawu.
- ☐ Inkawu iyabaleka.

15. Eli bali lithetha ngantoni? Shwankathela eli bali ngawakho amazwi.

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Appendix 3 - Post-Test – English: The ungrateful lion

Date:_____

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School:_____

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Translanguaging training/intervention 2017

Read the story below and then answer the questions following it.

In a dense forest, lived a fierce lion. He was very cruel. One day the lion was caught in a hunter's cage.

One by one many animals passed by. "Please helped me!" pleaded the lion. But none of the animals listened to his plea.

After a while, a boy happened to come into the forest. He saw the lion. The lion said, "I will die of hunger and suffocation. Please help me out. Ooh, kind boy!" The boy was thoughtful. "I assure you I will never harm you. Please help me now. The hunter will be here anytime now," said the lion.

The boy felt sorry for the lion and set the beast free. As soon as the lion was free, he made a loud roar.

“I have been trapped in the cage for a long time. I am hungry. I will have to eat you," said the lion, looking at the boy.

“But you promised that you would not harm me," said the boy, in a meek tone.

“Yes, I said that. But, only to convince you to free me. Now, I am very hungry," said the lion.

The scared boy thought quickly. He said, “Alright, you can eat me. But let a judge decide if you are right in eating the person who has rescued you."

The lion agreed. He was sure that no animal would speak against him.

Just then a jackal came that way and the lion asked the jackal to be the judge.

The jackal said to the lion, “Sir, would you please show me how it all happened?" The lion was only too willing. He entered the cage and closed the cage door. The jackal immediately bolted the cage from outside.

“Now the lion is trapped again. Run away, you foolish boy! And never offer help to anyone without thinking," said the jackal. The frightened boy ran for his life. And the ungrateful lion was trapped in the cage again. The hunter came and took the lion away to his circus.

Questions

1. Give this story a title

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2. This story teaches us that _____. *(Mark ☑ only one sentence below)*

- ☐ we must not help animals
- ☐ we must not help anyone we do not trust
- ☐ lions are nice animals
- ☐ lions do not eat children

3. Write numbers next to each of the following sentences to show the correct order of what happened in the story from the first until the last thing.

- ☐ A jackal got the lion back in the cage.
- ☐ Then the lion wanted to eat the boy.
- ☐ A lion was caught in a cage in a forest.
- ☐ A boy helped the lion out.

4. Choose a sentence that shows that the lion was not a nice animal.

- ☐ "Now I am so hungry."
- ☐ "Please help me now."
- ☐ "He was very cruel."
- ☐ "The hunter came and took the lion away..."

5. How many animals were trapped in the hunter's cage?

- ☐ One
- ☐ Two
- ☐ Many
- ☐ None

6. What kind of an animal do you think the jackal was?

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7. Why was the lion kept in a cage?

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8. The lion said, "Now I am so hungry." Why was he hungry?

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9. How did the boy feel when the lion said, "I will have to eat you"? Why do you think he felt that way?

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10. If you were that boy, what would you do to stop the lion from eating you?

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11. Why was the lion so sure that no animal would speak against him?

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12. If the jackal did not come, what do you think would happen between lion and the boy?

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13. What do you think will happen to the lion in the circus?

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14. What happens at the end of the story?

- ☐ The lion dies.
- ☐ The lion is taken away.
- ☐ The lion kills the boy.
- ☐ The lion kills the jackal.

15. What is this story about? Summarise or retell the story in short and in your own way.

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Appendix 4 - Post-Test – IsiXhosa: Indlovu ne ntaka



Date:_____

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School:_____

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Translanguaging training/intervention 2017

Funda eli bali, uze uphendule imibuzo elandelayo.

Kwakukho umthi omkhulu phakati kwehlathi. Phezulu kwalo mthi, intaka encinane ibisenze indlwana yengca, yenzele amantshontsho ayo amathathu. Kwathi ke ngaminazana ithile, kwagqitha indlovu phambi kwalo mthi, yema, yaqala ukuzikhuhla umqolo ngomthi. Ngenxa yobunzima be ndlovu umthi waqhekeka, kwabakhona intshukumo nesandi esikhulu. Amantshontsho entaka abambelela kumama wawo ngaphakathi kwendlu phezulu emthini, othuke kalusizi. Wakhupha umlomo wakhe umama wezintakana wathi “Silwanyana ndini esikhulu, kukho imithi emininzi apha kweli hlathi! Kutheni wazo kushukumisa lo? Wothuse abantwana bam, baphantse bawa kulendlu yethu yengca”.

Yathula indlovu ingathethi, kodwa yajonga intaka ngamehlo ayo amancinci, yashukumisa iindlebe zayo ezinkulu emoyeni, yasuka yahamba.

Ngemini elandelayo, yabuya indlovu kwakhona kulo mthi, yazikhuhla umqolo, nje ngakuqala. Umthi washukuma, kwakhona amantshotsho entaka othuka abambelela kakhulu kumama wawo. Ngokucaphuka ngoku intaka yathi, “Khawuyeke ukushukumisa lo mthi,” wakhwaza “okanye ndizakufundisa isifundo!”

“Uyakundenza ntoni ndisisilwanyana esikhulu kangaka nje?” Yahleka intsini indlovu. “Xa kuthanda mna ndingawutshova lomthi, le ndlu yakho kunye nababantwana bakho bayowela kude phaya.”

Intaka yathula, ayathetha nto.

Ngemini elandelayo futhi, yabuya indlovu ifuna ukuzakuzikhuhla umqolo ngomthi kwakhona. Ngale imini, intaka yaphuma ngokukhawuleza endlwaneni yayo phezulu emthini, yabhabhela phakathi kwendlebe enkulu yendlovu; yaya phakathi kuyo yaza yayinyumbaza ngenyawo zayo. Indlovu yashukumisa intloko…kwangenzeki nto. Indlovu yancama yacela intaka ukuba iphume endlebeni yayo kuba ibe isiva ubuhlungu. Yathembisa indlovu ukuba soze iphinde ibuye izo kukhuhla umqolo wayo kulo mthi nangenye imini.

Yaphuma intaka endlebeni ye ndlovu yabuyela endlwaneni yayo phezulu emthini, yazihlalela kufuphi nabantwana bayo.

Indlovu ayizange iphinde ibonakale izokukhuhla umqolo kulo mthi ukusukela lo mini.

Imibuzo

1. Sithini isihloko esilifaneleyo eli bali?

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2. Eli bali lisifundisa ntoni? Khetha isivakalisi sibe sinye ngokubeka uphawu u☑.

- ☐ Xa womelele kufuneka ubahluphe abanye.
- ☐ Indlovu akufanelekanga ukuba zishukumise imithi.
- ☐ Aba buthathaka bangakwazi ukuba ngelinye ixesha boyise abomeleleyo.
- ☐ Ungoyiki ingozi nanini na.

3. Bhala amanani ecaleni kwesivakalisi ngasinye, ubonakalise ukuba yintoni eyenzeka kuqala ebalini; yaza yalandelwa ngeyiphi, ngokulandelana kwazo kude kube ngeyokugqibela.

- ☐ Indlovu yaba nenkani yangahambi
- ☐ Intaka yabhabhela endlebeni yendlovu
- ☐ Intaka yaxelela indlovu ukuba mayihambe
- ☐ Yakhala indlovu yabaleka

4. Khetha isivakalisi esibonakalisa ukuba indlovu ibicinga ukuba yona inkulu futhi yomelele.

- ☐ Silwanyana ndini esikhulu…
- ☐ Yathula indlovu ingathethi,…
- ☐ Ngemini elandelayo yabuya indlovu…
- ☐ Uyakundenza ntoni …

5. Indlovu iphinde kangaphi ukuza kushukumisa umthi?

- ☐ Kanye
- ☐ Kabini
- ☐ Kathathu
- ☐ Kane

6. Xa ucinga, indlovu le yayisisilwanyana esinjani?

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7. Kutheni intaka iyakhe phezulu emthini indlwana yayo?

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8. Wenza ntoni umama untaka ukuba indlovu ingaphindi ibuyele emthini onendlwana yakhe?

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9. Xa ucinga, ayeziva njani amantshontsho entaka xa indlovu ishukimisa umthi?

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10. Ukuba wena wawungu mama untaka, wawungayinqanda njani indlovu ngaphandle kokuyi nyumbaza indlebe?

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……
……
……
……
……
.....

11. Kuthiwa indlovu yancama yakhala. Kwasekutheni?

……
……
……
……
……
……
.....

12. Ukuba indlovu ingaphinda ibuye kwakhona, ucinga ukuba kungenzeka ntoni?

……
……
……
……
……
……
.....

13. Kuthiwa indlovu ayizange iphinde ibuye ukuza kuzikhuhla kulo mthi kwakhona. Xa ucinga kwenzekantoni kwindlovu emva kokuba ingenwe yintaka endlebeni?

……
……
……
……
……

…….....

.....

14. Eli bali liphela njani?

- ☐ Indlovu iswelekile.
- ☐ Indlovu ayibuyanga futhi.
- ☐ Umthi ubuwomelele.
- ☐ Intaka ezincinci zafunda ukubhabha.

15. Eli bali lithetha ngantoni? Shwankathela eli bali ngawakho amazwi.

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.....

Appendix 5 – Wits Ethical clearance

Wits School of Education

27 St Andrews Road, Parktown, Johannesburg, 2193 Private Bag 3, Wits 2050, South Africa. Tel: +27 11 717-3064 Fax: +27 11 717-3100 E-mail: enquiries@educ.wits.ac.za Website: www.wits.ac.za

11 April 2017

Student Number: 0209173Y

Protocol Number: 2017ECE002D

Dear Vukile Mgijima

Application for ethics clearance: Doctor Philosophy

Thank you very much for your ethics application. The Ethics Committee in Education of the Faculty of Humanities, acting on behalf of the Senate, has considered your application for ethics clearance for your proposal entitled:

The effects of translanguaging techniques on teaching reading comprehension to IsiXhosa English bilingual grade four learners

The committee recently met and I am pleased to inform you that **clearance was granted**.

Please use the above protocol number in all correspondence to the relevant research parties (schools, parents, learners etc.) and include it in your research report or project on the title page.

The Protocol Number above should be submitted to the Graduate Studies in Education Committee upon submission of your final research report.

All the best with your research project.

Yours sincerely,

MMaseko

Wits School of Education

011 717-3416

cc Supervisor - Prof Leketi Makalela

Appendix 6 – ECDoE Ethical clearance



Province of the
EASTERN CAPE
EDUCATION

STRATEGIC PLANNING POLICY RESEARCH AND SECRETARIAT SERVICES
Steve Vukile Tshwete Complex • Zone 6 • Zwelitsha • Eastern Cape
Private Bag X0032 • Bhisho • 5605 • REPUBLIC OF SOUTH AFRICA
Tel: +27 (0)40 608 4773/4035/4637 • Fax: +27 (0)40 608 4574 • Website: www.ecdoe.gov.za

Enquiries: B Pamla Email: bahlaiwe.pamla@ecdoe.gov.za Date: 12 June 2017

Mr. Vukile D Mgijima

P O Box 1915

Matatiele

4730

Dear Mr. Vukile D Mgijima

PERMISSION TO UNDERTAKE A DOCTORAL THESIS: THE EFFECTS OF TRANSLANGUAGING TECHNIQUES ON TEACHING READING COMPREHENSION TO ISIXHOSA-ENGLISH BILINGUAL GRADE FOUR LEARNERS

1. Thank you for your application to conduct research.
2. Your application to conduct the abovementioned research in 10 selected schools in Cofimvaba under the jurisdiction of Chris Hani East District of the Eastern Cape Department of Education (ECDoE) is hereby approved based on the following conditions:
    a. there will be no financial implications for the Department;
    b. institutions and respondents must not be identifiable in any way from the results of the investigation;
    c. you present a copy of the written approval letter of the Eastern Cape Department of Education (ECDoE) to the Cluster and District Directors before any research is undertaken at any institutions within that particular district;
    d. you will make all the arrangements concerning your research;
    e. the research may not be conducted during official contact time;
    f. should you wish to extend the period of research after approval has been granted, an application to do this must be directed to Chief Director: Strategic Management Monitoring and Evaluation;



Appendix 7 - Drilling activities

Umhla:_____
Name:_____
Surname:_____

Read the paragraph below and answer the questions that follow.

UAndile ungena kowabo ekitchen, ajule ubhaka wakhe etafileni. Andule athi "Mama. Ndilambile."

Umama wakhe ambuze, "Uyigqibile ihomework yakho?"

Where was Andile before he came to the kitchen? And, *how do you know where Andile was at?*

_____
_____
_____
_____
_____
_____
_____
_____

What kind of a parent is Andile's mother? And, *how do you know this?*

_____
_____
_____
_____
_____
_____
_____
_____

Why has Andile not eaten yet? And, how do you know?

_____
_____
_____
_____

Umhla:_____
Name:_____
Surname:_____

Read the paragraph below and answer the questions that follow.
Nokonwaba's mom walks into the kitchen wearing her sun hat and a pair of old shoes. "Those vegetable plants are growing so fast!" she says to Nokonwaba, as she takes off a dirty glove and wipes a stain of dirt off her face.

Uvela phi umama kaNokonwaba? Uyazi njani lo nto?

_____
_____
_____
_____
_____

Xa ucinga, yayinjani imo yezulu ngalo mhla? Uyazi njani lo nto?

_____
_____
_____
_____
_____
_____

Umhla:_____
Name:_____
Surname:_____

Funda esi siqendwana silandelayo ube sele uphendula imibuzo elandelayo

I know a lot about teeth! My job is to help people keep their teeth clean and healthy. So, in addition to what your mom and dad always say, I am here to remind you to brush your teeth every day!

Yintoni umsebenzi walo mntu? Uyazi njani lo nto?

_____
_____
_____
_____

Kwenzeka ntoni xa umntu engawahlambi amazinyo akhe?

_____
_____
_____
_____

Umhla:_____
Name:_____
Surname:_____

Read the paragraph below and answer the questions that follow.
Yonke imihla emva komsebenzi, uMalume udla ngokukhulula ii-gumboots zakhe, azishiye phandle, aze athi, "Angandibulala unyoko-lume xa enokufumana ezi gumboots endlini." Abe sele ekhulula i-overall yakhe e-orange, kuvele u-shorty nevesti ngaphantsi; angqale e-bathroom

Who is Malume talking to?

_____
How do you know ukuba umalume uthetha nabani?

_____
_____
_____
What type of job does Malume work?

_____

_____

_____ _____

How do you know this (the type of job Malume does)?

_____

_____

_____

_____

__

Do you think Malume is tired? Why, or why not?

_____

_____

_____

_____

Are his overalls clean? Why?

_____

_____

_____

_____

Why would Malumekazi kill him if she found his gumboots in the house?

_____

_____

Is Malumekazi going to kill him for real?

_____

__

What do you think Malumekazi does if she finds the gumboots in the house?

_____

_____

_____

_____

Umhla:_____

Name:_____

Surname:_____

Funda esi siqendwana silandelayo ube sele uphendula imibuzo elandelayo

Cassie rolled over in her bed as she felt the sunlight hit her face. The beams (of the sunlight) were warming the back of her neck when she slowly realized that it was not a Saturday, and she started to panic. Struggling to open her eyes, she looked up at the clock. "9:00," she shouted, "Oh no!" Cassie jumped

out of bed, put on the first dress that she grabbed, brushed her teeth in two swipes, threw her books into her backpack, and then ran out the door. UCassie waye-panickiswa yintoni akufumanisa ukuba yayingelosuku lwangoMgqibelo?

_____

_____

_____

_____

Kutheni le nto kwakunzima ukuba avule amehlo akhe?

_____

_____

_____

_____

Yintoni eyamenza ukuba athi "Oh no!" ?

_____

_____

_____

_____

Waphuma ebaleka uCassie. Wayesiya phi? Uyazi njani lo nto?

_____

_____

_____

_____

Appendix 8 – Lesson Plan for teaching reading using a translanguaging approach

Lesson plan for explicitly teaching reading comprehension (of longer passages/story) using a translanguaging approach

Name of school:

Date:

Grade: 4

Duration: 40 - 50 minutes

Teaching approach: Translingual Interactive/conversational

Resources Required

1. Reading text
2. Questions & answer books/spaces
3. Marking guide/model answers

Aim	Objective: By the time the lesson comes to the end, learners will be able to	Teacher activity			Learner activity		
		Pre-reading activity	During reading	After reading	Pre-reading activity	During reading	After reading
reading/comprehension skills		of the text & related vocabulary (3 - 5 minutes)	ask learners to make new predictions about the subsequent events in the text (2 - 5 minutes) learners read on their own (silently); attempt a quiz based on the text (20 - 30 minutes)		the text will be about	Listen; read along	learners read on their own (silently); attempt a quiz

	make inferences based on their knowledge/experience and information presented in the text				□	□	□
	recall literal information presented in the text						□
	tell what the text was about (i.e. summarise the text)						□
	participate in class discussion/share ideas related to the text				□	□	□
	make predictions regarding the events mentioned (or not mentioned) in the text				□	□	□
	answer questions based on the reading text					□	□
	use comprehension strategies to interpret literal and inferred meaning, expand content knowledge, and integrate/link ideas presented in the text with background knowledge					□	□
<u>Other skills indirectly addressed</u>: Critical thinking & problem solving, communication (i.e speaking, listening, writing) & collaboration							
Procedures:							
Learners sit in class as normal							
Teacher announces that today's lesson will be on reading							
Teacher writes key words of the title of the reading text on the chalk board							
In pairs - Learners put the key words together to formulate a meaningful title in one language (e.g. home language) and then its equivalent in another (e.g. English)							

Teacher writes the correct title on the board and then asks the learners to provide its equivalent in another language
Teacher asks what they think the reading will be about
Learners volunteer their answers and (are encouraged to) explain why
Teacher writes on the board key vocabulary terminology found in the text (If conditions allow, have learners look up the meanings of difficult key words in their dictionaries) and then asks learners to guess what the reading will be about
Students' reading text is distributed to the class (each learner gets a copy)
Teacher does not tell the learners what the reading will be about but starts reading
Each learner is responsible for reading along silently while the teacher reads aloud
Teachers pauses at certain points and asks learners to predict how the events will unfold in the text (The teacher asks learners in a different language from the one the text is in, and allows learners to respond in either one). Possible questions: Were you right? (If the answer is in the affirmative, the learner should be asked how they know and be required to support their answer with evidence from the text, if any. If the answer is in the negative, the ff question should follow: has something been added to your information that rules out your prediction? Why do you think your predictions won't work anymore?)
Have student volunteers to answer the questions
Teacher thinks aloud - redirects students' thinking re the story. Possible questions: Is your idea still possible? Do you wish to change your prediction? Now, what do you think will happen next?
Teacher continues reading or asks 1 or 2 learners to read; pauses at certain points to clasrify them or to ask questions. NB: questions whose answers (or hints thereto) in the text have been provided in home language MUST be asked in English and vise-versa
In pairs have students discuss about the events in the reading – in their home language e.g. the what the story is about; the order in which events occur in the story; why certain things happen in a particular way/order in the story and find supporting evidence from the story (or provide their own based on background knowledge).
Teacher walks around the room and observes the student's participation
Learners share their ideas with the rest of the class
Each learner reads/reviews the text silently
Class is directed to answer comprehension check questions/quiz individually

NB: In the quiz, **questions whose answers** (or hints thereto) **are in home language MUST be asked in English and vise-versa**; learners should be required to provide evidence for their answers to open ended questions - the supporting evidence may be obtained from the text or be in the form of clearly explained background knowledge (e.g. follow the answer up with the question "How do you know?"; some MCQ questions can be followed by questions like "Write a sentence or a word from the passage that has made you choose the above answer"
Summarising skill: Teacher rewrites the story into shorter sentences, and then cuts up the sentences into sentences strips. Get the learners (in pairs) rearrange the sentence strips into the correct sequence. NB the sentences are presented in different languages; later learners write numbers to reflect the correct order re how the events unfold in the story
Each student completes and submits answers to the teacher to check and verify
Teacher corrects them/gives feedback
Assessment:
1. Formative assessment will be based primarily on oral responses from the learners in terms of their ability to answer the questions from the reading and sharing their personal experiences, and by observing them during the discussion about the reading
2. Towards the end of the lesson, learners will attempt a comprehension check exercise

It's always good to reflect on what you've done if you want to improve. Here are some questions that one can ask oneself that will help them
reflect on their lessons:

1. Was the instructional objective met? How do I know students learned what was intended?

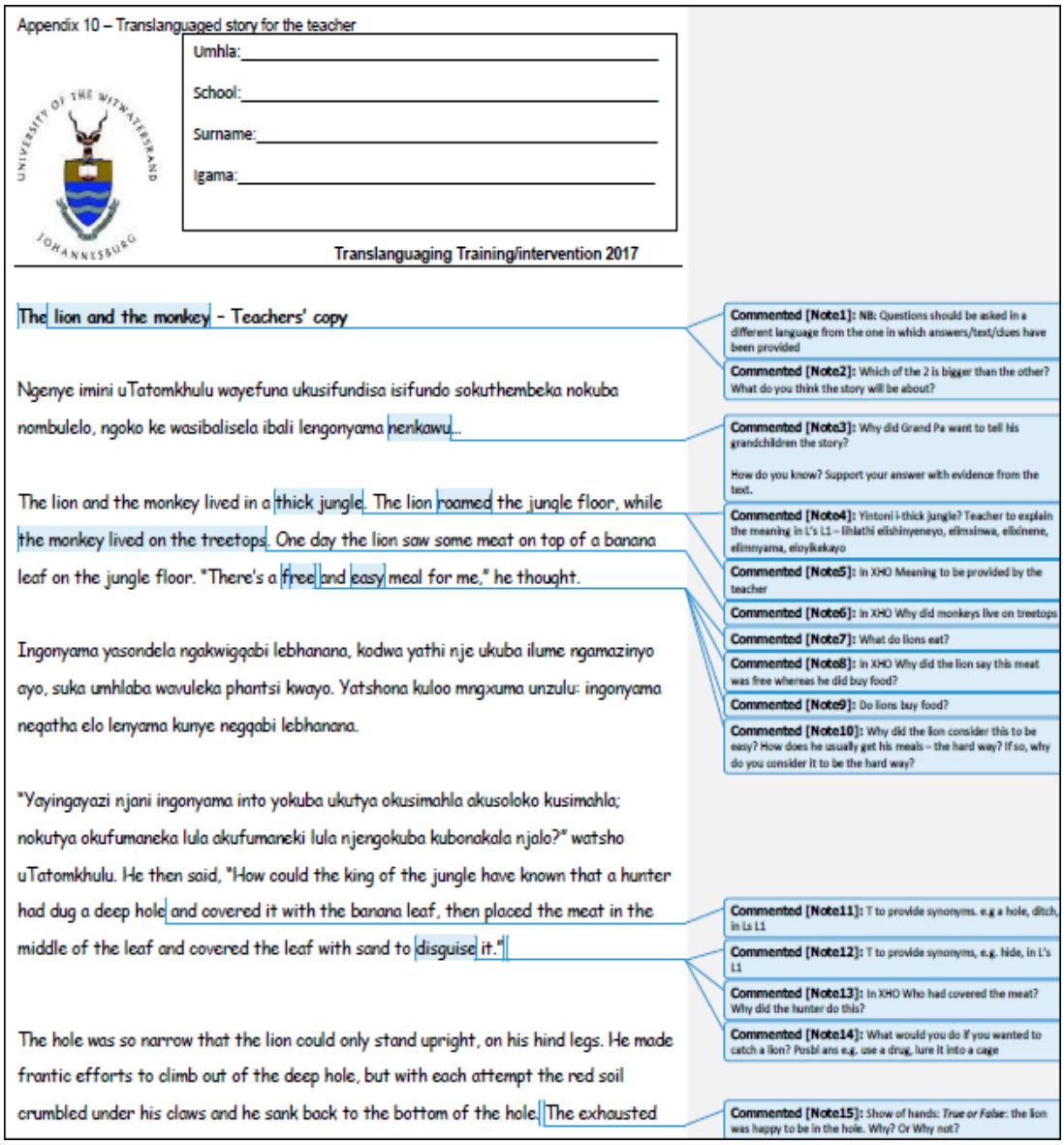
2. Were the students productively engaged? How do I know?

3. Did I alter my instructional plan as I taught the lesson? Why?

4. What additional assistance, support, and/or resources would have further enhanced this lesson?

5. If I had the opportunity to teach the lesson again to the same group of students, would I do anything differently? What? Why?

Appendix 9 – Translanguaged story with teacher's guide/notes 1



Appendix 10 – Translanguaged story for the teacher

Umhla:_____

School:_____

Surname:_____

Igama:_____

Translanguaging Training/intervention 2017

The lion and the monkey – Teachers' copy

Ngenye imini uTatomkhulu wayefuna ukusifundisa isifundo sokuthembeka nokuba nombulelo, ngoko ke wasibalisela ibali lengonyama nenkawu..

The lion and the monkey lived in a thick jungle. The lion roamed the jungle floor, while the monkey lived on the treetops. One day the lion saw some meat on top of a banana leaf on the jungle floor. "There's a free and easy meal for me," he thought.

Ingonyama yasondela ngakwigqabi lebhanana, kodwa yathi nje ukuba ilume ngamazinyo ayo, suka umhlaba wavuleka phantsi kwayo. Yatshona kuloo mngxuma unzulu: ingonyama negatha elo lenyama kunye negqabi lebhanana.

"Yayingayazi njani ingonyama into yokuba ukutya okusimahla akusoloko kusimahla; nokutya okufumaneka lula akufumaneki lula njengokuba kubonakala njalo?" watsho uTatomkhulu. He then said, "How could the king of the jungle have known that a hunter had dug a deep hole and covered it with the banana leaf, then placed the meat in the middle of the leaf and covered the leaf with sand to disguise it."

The hole was so narrow that the lion could only stand upright, on his hind legs. He made frantic efforts to climb out of the deep hole, but with each attempt the red soil crumbled under his claws and he sank back to the bottom of the hole. The exhausted

Commented [Note1]: NB: Questions should be asked in a different language from the one in which answers/text/clues have been provided

Commented [Note2]: Which of the 2 is bigger than the other? What do you think the story will be about?

Commented [Note3]: Why did Grand Pa want to tell his grandchildren the story?

How do you know? Support your answer with evidence from the text.

Commented [Note4]: Yintoni i-thick jungle? Teacher to explain the meaning in L's L1 – lihlathi elishinyeneyo, elimxinwa, elixinene, elimnyama, eloyikekayo

Commented [Note5]: In XHO Meaning to be provided by the teacher

Commented [Note6]: In XHO Why did monkeys live on treetops

Commented [Note7]: What do lions eat?

Commented [Note8]: In XHO Why did the lion say this meat was free whereas he did buy food?

Commented [Note9]: Do lions buy food?

Commented [Note10]: Why did the lion consider this to be easy? How does he usually get his meals – the hard way? If so, why do you consider it to be the hard way?

Commented [Note11]: T to provide synonyms. e.g a hole, ditch, in Ls L1

Commented [Note12]: T to provide synonyms, e.g. hide, in L's L1

Commented [Note13]: In XHO Who had covered the meat? Why did the hunter do this?

Commented [Note14]: What would you do if you wanted to catch a lion? Possi ans e.g. use a drug, lure it into a cage

Commented [Note15]: Show of hands: *True or False*: the lion was happy to be in the hole. Why? Or Why not?

lion was still there at dusk when suddenly he saw a tail pass by. The tail belonged to a monkey who had jumped over the hole. The lion called desperately for help.

"Kumkani wenza ntoni emngxunyeni onzulu nomnyama kangaka?" yayibuza ngelitshoyo inkawu, ijonge emngxunyeni.

"Ndiwele apha," yatsho ingonyama ngelizwi elibonakalisa ukuphelelwa ngamandla. "Kudala ndilapha okoko kwakusasa. Nceda undisindise."

Inkawu yathandabuza yaze yasuka yahamba, kodwa ingonyama yazinga ngokuyicenga. Yathi inkawu engonyameni, "Kuthiwa zonke izilwanyana ezakhe zakunceda, zange ziphile ukuze zikwazi ukubalisa elo bali."

"Ndiyazi ukuba ukrelekrele ukuba ungakholelwa ubuxoki obuxelelwa ziintshaba zam ngam," yatsho ingonyama,

"Nceda, ndihlangule."

In the end the monkey took holey on the lion and lowered his tail into the hole like a rope. The lion held on to the monkey's tail and climbed up it. But even when he was out of the hole, the lion hung onto the monkey's tail.

"Let me go! Haven't I helped you out of the deep hole as you begged me to?" the monkey asked the lion.

But the lion tightened his grip on the monkey's tail even more, and when the monkey looked into the lion's eyes, he saw the look of hunger. "Please let me go!" the monkey cried. But the lion's grip only got tighter.

Ngephanyazo kwathi gqi ixhegokazi. Lalisendleleni eya kwifama yalo ukubona kwalo ezi zilwanyana zibini zixambulisana. Lema labuza ukuba zilwela ntoni na. Inkawu yalichazela indlela ethe yanceda ngayo ingonyama yayikhupha emngxunyeni onzulu. "Kodwa ngoku ibambe nkqi umsila wam ayifuni kundiyeka ndihambe," yakhalaza.

"Ingaba oku yinyaniso?" ixhegokazi labuza ingonyama. Ingonyama yanqwala ivuma. Ixhegokazi lathi kwinkawu, "Dibanisa izandla zakho uthi, 'Ngoku ndiza kufa ndifela inceba yam. 'I am about to die for my kindness.'"

Commented [Note16]: How come did the monkey not sink into the hole? Posbl ans. because she could see it; it was not disguised anymore.

Commented [Note17]: How long has the lion been there for? What time of the day do you think it is now? Is the lion NOT hungry? Why/not? (has it eaten the bait meat? How do you know? Why not i.e. why can't it eat it?

Commented [Note18]: Why did the monkey hesitate to help the lion?

Commented [Note19]: Pause here and ask: If you were the monkey, would you help the lion? Why/why not?

Commented [Note20]: Would you believe the lion? Why/not?

Commented [Note21]: In ENG What do you think the monkey will/should do hereafter? Posbl ans: leave (why), help/rescue the lion (why)

Commented [Note22]: IN XHO Why was the lion not letting the monkey go? Was he excited that the monkey helped him and was giving the monkey a firm hug?

Commented [Note23]: If you were the lion, would you let the monkey go even if you were hungry and had not eaten the whole day? Why or why not?

Commented [Note24]: What do you think will happen next?

Commented [Note25]: Do cows/dogs/monkeys have hands? Fingers? How many legs do monkeys have? How many hands do they have?

lion was still there at dusk when suddenly he saw a tail pass by. The tail belonged to a monkey who had jumped over the hole. The lion called desperately for help.

"Kumkani wenza ntoni emngxunyeni onzulu nomnyama kangaka?" yayibuza ngelitshoyo inkawu, ijonge emngxunyeni.

"Ndiwele apha," yatsho ingonyama ngelizwi elibonakalisa ukuphelelwa ngamandla. "Kudala ndilapha okoko kwakusasa. Nceda undisindise."

Inkawu yathandabuza yaze yasuka yahamba, kodwa ingonyama yazinga ngokuyicenga. Yathi inkawu engonyameni, "Kuthiwa zonke izilwanyana ezakhe zakunceda, zange ziphile ukuze zikwazi ukubalisa elo bali."

"Ndiyazi ukuba ukrelekrele ukuba ungakholelwa ubuxoki obuxelelwa ziintshaba zam ngam," yatsho ingonyama,

"Nceda, ndihlangule."

In the end the monkey took holey on the lion and lowered his tail into the hole like a rope. The lion held on to the monkey's tail and climbed up it. But even when he was out of the hole, the lion hung onto the monkey's tail.

"Let me go! Haven't I helped you out of the deep hole as you begged me to?" the monkey asked the lion.

But the lion tightened his grip on the monkey's tail even more, and when the monkey looked into the lion's eyes, he saw the look of hunger. "Please let me go!" the monkey cried. But the lion's grip only got tighter.

Ngephanyazo kwathi ggi ixhegokazi. Lalisendleleni eya kwifama yalo ukubona kwalo ezi zilwanyana zibini zixambulisana. Lema labuza ukuba zilwela ntoni na. Inkawu yalichazela indlela ethe yanceda ngayo ingonyama yayikhupha emngxunyeni onzulu. "Kodwa ngoku ibambe nkqi umsila wam ayifuni kundiyeka ndihambe," yakhalaza.

"Ingaba oku yinyaniso?" ixhegokazi labuza ingonyama. Ingonyama yanqwala ivuma. Ixhegokazi lathi kwinkawu, "Dibanisa izandla zakho uthi, 'Ngoku ndiza kufa ndifela inceba yam. 'I am about to die for my kindness.'"

Ngokwenene ke, inkawu yenza njalo.

The old woman then turned to the lion and said, "Clasp your paws and say, 'Someone is about to die for his kindness. Someone is about to die for his kindness.'" The lion raised his free front paw and repeated the old woman's words.

"Hayi!" latsho ixhegokazi, "Ndithe dibanisa iintupha zakho, kwaye ndithetha iintupha zakho zamanqina omabini angaphambili, uze uthethe la mazwi." Lo gama ingonyama ithobela umyalelo wexhegokazi idibanisa iintupha zayo, inkawu yaphuncuka yabaleka yemka. Ingonyama yayileqa inkawu yade yakhwela emthini owawukufutshane. Idakumbile, ingonyama yabheka ijonga kwindawo ababelibone kuyo ixhegokazi, kodwa ixhegokazi lalingasekho apha.

Grandpa paused and looked at our faces that had suddenly lit up at the happy ending for the monkey.

Commented [Note16]: How come did the monkey not sink into the hole? Posbl ans. because she could see it; it was not disguised anymore.

Commented [Note17]: How long has the lion been there for? What time of the day do you think it is now? Is the lion NOT hungry? Why/not? (has it eaten the bait meat? How do you know? Why not i.e. why can't it eat it?

Commented [Note18]: Why did the monkey hesitate to help the lion?

Commented [Note19]: Pause here and ask: If you were the monkey, would you help the lion? Why/why not?

Commented [Note20]: Would you believe the lion? Why/not?

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Commented [Note24]: What do you think will happen next?

Commented [Note25]: Do cows/dogs/monkeys have hands? Fingers? How many legs do monkeys have? How many hands do they have?

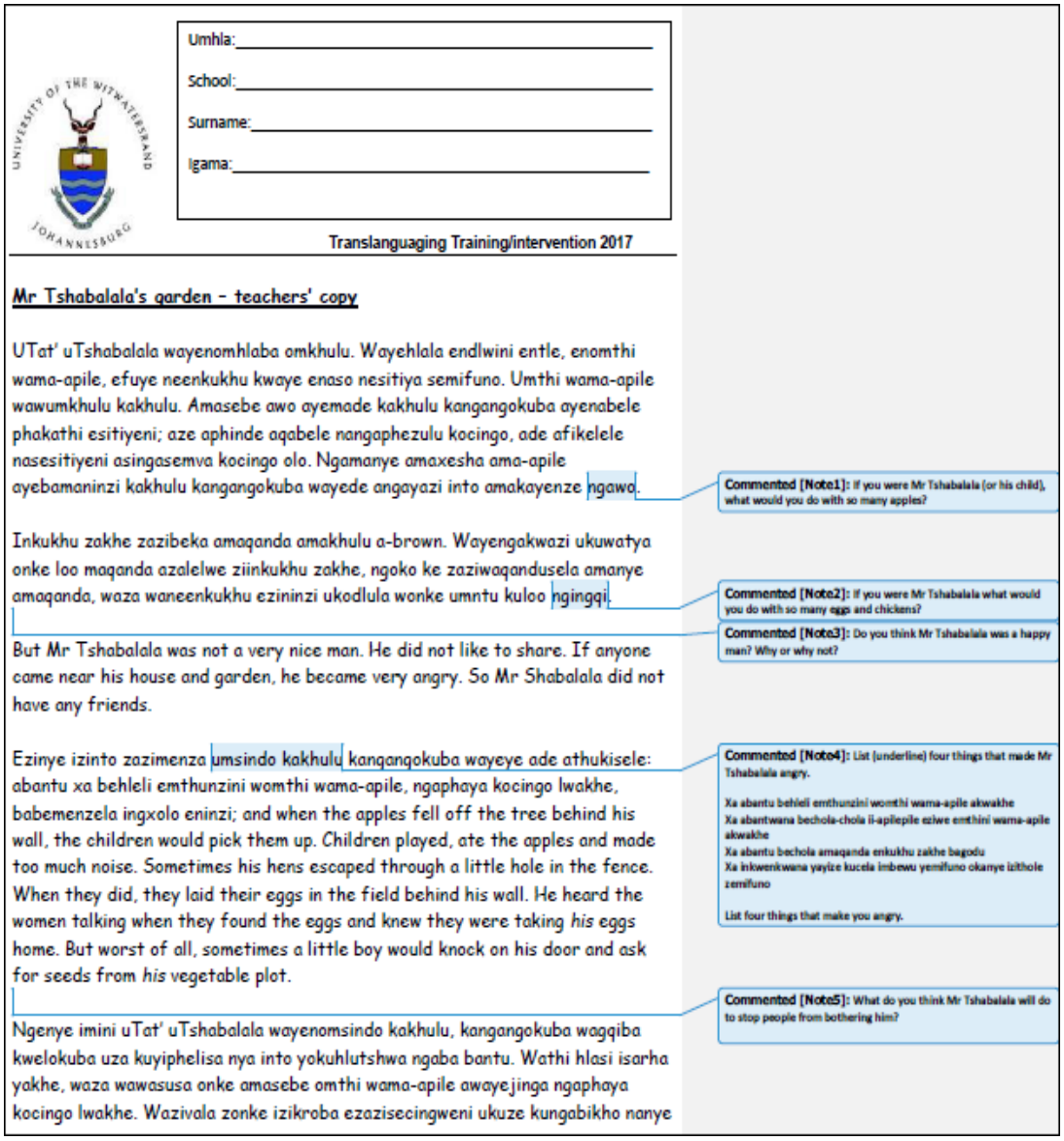
Commented [Note26]: Do lions have hands? Fingers? What do they have instead?

Commented [Note27]: Synonym - leg

Commented [Note28]: Where did the old woman go? Why did she leave?

Commented [Note29]: Summarise the story in your own way.

Appendix 10 – Translanguaged story with teacher's guide/notes 2



Umhla:_____

School:_____

Surname:_____

Igama:_____

Translanguaging Training/intervention 2017

Mr Tshabalala's garden – teachers' copy

UTat' uTshabalala wayenomhlaba omkhulu. Wayehlala endlwini entle, enomthi wama-apile, efuye neenkukhu kwaye enaso nesitiya semifuno. Umthi wama-apile wawumkhulu kakhulu. Amasebe awo ayemade kakhulu kangangokuba ayenabele phakathi esitiyeni; aze aphinde aqabele nangaphezulu kocingo, ade afikelele nasesitiyeni asingasemva kocingo olo. Ngamanye amaxesha ama-apile ayebamaninzi kakhulu kangangokuba wayede angayazi into amakayenze ngawo.

Commented [Note1]: If you were Mr Tshabalala (or his child), what would you do with so many apples?

Inkukhu zakhe zazibeka amaqanda amakhulu a-brown. Wayengakwazi ukuwatya onke loo maqanda azalelwe ziinkukhu zakhe, ngoko ke zaziwaqandusela amanye amaqanda, waza waneenkukhu ezininzi ukodlula wonke umntu kuloo ngingqi.

Commented [Note2]: If you were Mr Tshabalala what would you do with so many eggs and chickens?

Commented [Note3]: Do you think Mr Tshabalala was a happy man? Why or why not?

But Mr Tshabalala was not a very nice man. He did not like to share. If anyone came near his house and garden, he became very angry. So Mr Shabalala did not have any friends.

Ezinye izinto zazimenza umsindo kakhulu kangangokuba wayeye ade athukisele: abantu xa behleli emthunzini womthi wama-apile, ngaphaya kocingo lwakhe, babemenzela ingxolo eninzi; and when the apples fell off the tree behind his wall, the children would pick them up. Children played, ate the apples and made too much noise. Sometimes his hens escaped through a little hole in the fence. When they did, they laid their eggs in the field behind his wall. He heard the women talking when they found the eggs and knew they were taking *his* eggs home. But worst of all, sometimes a little boy would knock on his door and ask for seeds from *his* vegetable plot.

Commented [Note4]: List (underline) four things that made Mr Tshabalala angry.

Xa abantu behleli emthunzini womthi wama-apile akwakhe
Xa abantwana bechola-chola ii-apilepile eziwe emthini wama-apile akwakhe
Xa abantu bechola amaqanda enkukhu zakhe bagodu
Xa inkwenkwana yayize kucela imbewu yemifuno okanye izithole zemifuno

List four things that make you angry.

Ngenye imini uTat' uTshabalala wayenomsindo kakhulu, kangangokuba wagqiba kwelokuba uza kuyiphelisa nya into yokuhlutshwa ngaba bantu. Wathi hlasi isarha yakhe, waza wawasusa onke amasebe omthi wama-apile awayejinga ngaphaya kocingo lwakhe. Wazivala zonke izikroba ezazisecingweni ukuze kungabikho nanye

Commented [Note5]: What do you think Mr Tshabalala will do to stop people from bothering him?

inkukhu ezakuthubeleza. Wayenomsindo kakhulu kangangokuba wayigrumba yonke loo mifuno yayikweso sitiya sakhe.

"At last I will have peace and quiet, kungekho mntu ondihluphayo, or anyone stealing anything from me," he said.

It did not take long before there were too many apples on the tree. There were too many hens, chickens and eggs. And because there was no vegetable patch, there were no vegetables for Mr Tshabalala.
But there was something that was even worse than that. It was now so quiet that Mr Shabalala got a headache. Usizana olunguTat' uTshabalala lwalungazi ukuba lungenza ntoni ngesi sizungu senzolo engaka. So he opened his front door and shouted the loudest shout that he could, just to make some noise.

Ngesaquphe kuthe wayi-wayi abantu begxalathelana, ukuza endlwini yakhe.
"Kwenzeka ntoni?"
"Ingaba wonzakele?"
"Singakunceda ngantoni?"

"Ndi... ndi..." Mr Shabalala didn't know what to say. Even though he had been so nasty and unkind, everyone had come to see if he was alright. Mr Shabalala felt so bad he started to cry. "I'm sorry," he said. "I'm so sorry."

"We're sorry for making a noise in the shade of your apple tree," said someone.
"We're sorry for taking apples," said the children.
"We're sorry about collecting eggs," said a woman.

"Owu hayi," watsho uTat' uTshabalala. "Bendicinga ukuba umntu ndim ndedwa kwaye bendikrwada kuni. Ndicela uxolo. Ncedani, nonke ngenani ngaphakathi ukuze ndabelane nani ngako konke."

When everyone left, he smiled happily because now there were happy noises outside.

"Eish!" UTat' uTshabalala wakhumbula ukuba kanene akasenaso ngoku isitiya semifuno. Kanye ngalo mzuzu kwavakala *unkqo, nkqo, nkqo* kumnyango wangaphambili. Wavula ucango waza wabona kumi inkwenkwana.

"Aaah," he said, "you are the boy who always asked for seeds."
"Yes," said the boy, "but I know you don't have a vegetable garden now. Can I help you plant one?"

And, for the second time that day, Mr Shabalala had tears in his eyes. But this time they were tears of happiness.

Commented [Note6]: Ucinga ukuba uzawuhlala ngoxolo uTat' uTshabalala emva koku?

Commented [Note7]: Ukuba wawungu Tat' uTshabalala, wawungenza ntoni xa kuthe cwaka ngololo hlobo, ube usifa sibthukuthezi?

Commented [Note8]: Lithetha ntoni igama elthi "wayi-wayi"

Commented [Note9]: Wena ubungamnceda umntu awasarha umthi wakhe wee-apilepile kuba engafuni ukuba uchole ii-apilepile eziwe phantsi kwalo mthi? Kutheni usitsho njalo?

Commented [Note10]: Xa yayizocela imbewu, wayika uTat' uTshabalala le nkwenkwana? Wazi njani? Xhasa impendulo yakho.

Commented [Note11]: Wayelilela ntoni ngoku uTat 'uTshabalala? Wena, ukhe ulile xa wonwabe kakhulu?

Commented [Note12]: Now write a short summary (isishwankathelo) of the story either in English or in isiXhosa. Start by the sentence "Eli bali li..." or "This story is about..." And then share it (read it aloud to) with the rest of the class

Appendix 11 – Translanguaged story – learner's copy 1

Umhla:_____

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School:_____

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Surname:_____

Translanguaging Intervention/training 2017

The lion and the monkey – learners' copy

Ngenye imini uTatomkhulu wayefuna ukusifundisa isifundo sokuthembeka nokuba nombulelo, ngoko ke wasibalisela ibali lengonyama nenkawu…

The lion and the monkey lived in a thick jungle. The lion roamed the jungle floor, while the monkey lived on the treetops. One day the lion saw some meat on top of a banana leaf on the jungle floor. "There's a free and easy meal for me," he thought.

Ingonyama yasondela ngakwigqabi lebhanana, kodwa yathi nje ukuba ilume ngamazinyo ayo, suka umhlaba wavuleka phantsi kwayo. Yatshona kuloo mngxuma unzulu: ingonyama neqatha elo lenyama kunye negqabi lebhanana.

"Yayingayazi njani ingonyama into yokuba ukutya okusimahla akusoloko kusimahla; nokutya okufumaneka lula akufumaneki lula njengokuba kubonakala njalo?" watsho uTatomkhulu. He then said, "How could the king of the jungle have known that a hunter had dug a deep pit and covered it with the banana leaf, then placed the meat in the middle of the leaf and covered the leaf with sand to disguise it."

The pit was so narrow that the lion could only stand upright, on his hind legs. He made frantic efforts to climb out of the deep pit, but with each attempt the red soil crumbled under his claws and he sank back to the bottom of the pit. The exhausted lion was still there at dusk when suddenly he saw a tail pass by. The tail belonged to a monkey who had jumped over the pit. The lion called desperately for help.
"Kumkani wenza ntoni emngxunyeni onzulu nomnyama kangaka?" yayibuza ngelitshoyo inkawu, ijonge emngxunyeni.

"Ndiwele apha," yatsho ingonyama ngelizwi elibonakalisa ukuphelelwa ngamandla. "Kudala ndilapha okoko kwakusasa. Nceda undisindise."
Inkawu yathandabuza yaze yasuka yahamba, kodwa ingonyama yazinga ngokuyicenga. Yathi inkawu engonyameni, "Kuthiwa zonke izilwanyana ezakhe zakunceda, zange ziphile ukuze zikwazi ukubalisa elo bali."

"Ndiyazi ukuba ukrelekrele ukuba ungakholelwa ubuxoki obuxelelwa ziintshaba zam ngam," yatsho ingonyama,
"Nceda, ndihlangule."

In the end the monkey took pity on the lion and lowered his tail into the pit like a rope. The lion held on to the monkey's tail and climbed up it. But even when he was out of the pit, the lion hung onto the monkey's tail.
"Let me go! Haven't I helped you out of the deep pit as you begged me to?" the monkey asked the lion.
But the lion tightened his grip on the monkey's tail even more, and when the monkey looked into the lion's eyes, he saw the look of hunger. "Please let me go!" the monkey cried. But the lion's grip only got tighter.

Ngephanyazo kwathi gqi ixhegokazi. Lalisendleleni eya kwifama yalo ukubona kwalo ezi zilwanyana zibini zixambulisana. Lema labuza ukuba zilwela ntoni na. Inkawu yalichazela indlela ethe yanceda ngayo ingonyama yayikhupha emngxunyeni onzulu. "Kodwa ngoku ibambe nkqi umsila wam ayifuni kundiyeka ndihambe," yakhalaza.
"Ingaba oku yinyaniso?" ixhegokazi labuza ingonyama. Ingonyama yanqwala ivuma. Ixhegokazi lathi kwinkawu, "Dibanisa izandla zakho uthi, 'Ngoku ndiza kufa ndifela inceba yam. 'I am about to die for my kindness.'"
Ngokwenene ke, inkawu yenza njalo.

The old woman then turned to the lion and said, "Clasp your paws and say, 'Someone is about to die for his kindness. Someone is about to die for his kindness.'" The lion raised his free front paw and repeated the old woman's words.

"Hayi!" latsho ixhegokazi, "Ndithe dibanisa iintupha zakho, kwaye ndithetha iintupha zakho zamanqina omabini angaphambili, uze uthethe la mazwi." Lo gama ingonyama ithobela umyalelo wexhegokazi idibanisa iintupha zayo, inkawu yaphuncuka yabaleka yemka. Ingonyama yayileqa inkawu yade yakhwela emthini owawukufutshane. Idakumbile, ingonyama yabheka ijonga kwindawo ababelibone kuyo ixhegokazi, kodwa ixhegokazi lalingasekho apho.

Grandpa paused and looked at our faces that had suddenly lit up at the happy ending for the monkey.

Adopted from Nal'bali (www.nalibali.co.za). Edited for research purposes by VD Mgijima

Umhla:_____

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School:_____

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Surname:_____

Translanguaging Training/intervention 2017

Read the story below and answer the question that follow

Akhona and Zikhona are twins. They are 8 years old. They live in a shack near Area C in Matatiele. Their parents died 2 years ago because of HIV/Aids related illnesses.

Abamelwane baba bantwana ababonakalisi velwano kwaba bantwana kuba akukho luncedo babanika lona. Endaweni yokubanceda, babathuma utywala, icuba, amanzi neminye imisebenzi abangenakho ukuyithuma ababo abatwana.

A local church tried to find help for these children from Social Welfare Department but failed. Lo nto ke ithetha ukuba balala, baze bavuke ngamanzi.

Aba bantwana basoloko bevuza iimpumlo ngenxa yetyotyombe labo elisisihluzo esigxiza amanzi ngexesha lemvula, liphinde lihuhuze umoya xa ligquthayo. Le meko ithi yenziwe worse kukuba neziko lempilo limgama ongenakuhanjwa ngeenyawo ukusuka apho bahlala khona, babe bengenayo nepeni emdaka yokuya apho. They cannot even go to school because it is too far.

The situation of these kids is very sad.

Imibuzo

1. What do you think should be the title of the above passage?

_____

2. Kuthethwa ngantoni apha?

_____

_____

_____

_____

_____

3. Xa ucinga, where do these children get food from?

_____

_____

4. Singabafundi, singabanceda njani aba bantwana?

5. Underline a sentence that shows that these children were being abused?
6. Ncedo luni abebengalufumana kwa-Social Welfare Department aba bantwana?

7. Underline a sentence that shows the reason why these children cannot go to the clinic?
8. Babeneminyaka emingaphi ukusweleka kwabazali babo aba bantwana?

9. How do you feel when you hear about these kids' situation?

10. What would you do if you were in a similar situation?

11. What is the meaning of "ityotyombe … elisisihluzo esigxiza amanzi ngexesha lemvula"?

12. What is the meaning of "bengenayo nepeni emdaka"?

Appendix 12 – Translanguaged story – learners copy 2



Umhla:_____

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School:_____

_____

Surname:_____

Translanguaging Training/intervention 2017

Mr Tshabalala's garden – learners' copy

UTat' uTshabalala wayenomhlaba omkhulu. Wayehlala endlwini entle, enomthi wama-apile, efuye neenkukhu kwaye enaso nesitiya semifuno. Umthi wama-apile wawumkhulu kakhulu. Amasebe awo ayemade kakhulu kangangokuba ayenabele phakathi esitiyeni; aze aphinde aqabele nangaphezulu kocingo, ade afikelele nasesitiyeni asingasemva kocingo olo. Ngamanye amaxesha ama-apile ayebamaninzi kakhulu kangangokuba wayede angayazi into amakayenze ngawo.

Inkukhu zakhe zazibeka amaqanda amakhulu a-brown. Wayengakwazi ukuwatya onke loo maqanda azalelwe ziinkukhu zakhe, ngoko ke zaziwaqandusela amanye amaqanda, waza waneenkukhu ezininzi ukodlula wonke umntu kuloo ngingqi.

But Mr Tshabalala was not a very nice man. He did not like to share. If anyone came near his house and garden, he became very angry. So Mr Shabalala did not have any friends.

Ezinye izinto zazimenza umsindo kakhulu kangangokuba wayeye ade athukisele: abantu xa behleli emthunzini womthi wama-apile, ngaphaya kocingo lwakhe, babemenzela ingxolo eninzi; and when the apples fell off the tree behind his wall, the children would pick them up. Children played, ate the apples and made too much noise. Sometimes his hens escaped through a little hole in the fence. When they did, they laid their eggs in the field behind his wall. He heard the women talking when they found the eggs and knew they were taking *his* eggs home. But worst of all, sometimes a little boy would knock on his door and ask for seeds from *his* vegetable plot.

Ngenye imini uTat' uTshabalala wayenomsindo kakhulu, kangangokuba wagqiba kwelokuba uza kuyiphelisa nya into yokuhlutshwa ngaba bantu. Wathi hlasi isarha

yakhe, waza wawasusa onke amasebe omthi wama-apile awayejinga ngaphaya kocingo lwakhe. Wazivala zonke izikroba ezazisecingweni ukuze kungabikho nanye inkukhu ezakuthubeleza. Wayenomsindo kakhulu kangangokuba wayigrumba yonke loo mifuno yayikweso sitiya sakhe.

"At last I will have peace and quiet, kungekho mntu ondihluphayo, or anyone stealing anything from me," he said.

It did not take long before there were too many apples on the tree. There were too many hens, chickens and eggs. And because there was no vegetable patch, there were no vegetables for Mr Tshabalala.
But there was something that was even worse than that. It was now so quiet that Mr Shabalala got a headache. Usizana olunguTat' uTshabalala lwalungazi ukuba lungenza ntoni ngesi sizungu senzolo engaka. So he opened his front door and shouted the loudest shout that he could, just to make some noise.

Ngesaquphe kuthe wayi-wayi abantu begxalathelana, ukuza endlwini yakhe.
"Kwenzeka ntoni?"
"Ingaba wonzakele?"
"Singakunceda ngantoni?"

"Ndi… ndi…" Mr Shabalala didn't know what to say. Even though he had been so nasty and unkind, everyone had come to see if he was alright. Mr Shabalala felt so bad he started to cry. "I'm sorry," he said. "I'm so sorry."

"We're sorry for making a noise in the shade of your apple tree," said someone.
"We're sorry for taking apples," said the children.
"We're sorry about collecting eggs," said a woman.

"Owu hayi," watsho uTat' uTshabalala. "Bendicinga ukuba umntu ndim ndedwa kwaye bendikrwada kuni. Ndicela uxolo. Ncedani, nonke ngenani ngaphakathi ukuze ndabelane nani ngako konke."

When everyone left, he smiled happily because now there were happy noises outside.

"Eish!" UTat' uTshabalala wakhumbula ukuba kanene akasenaso ngoku isitiya semifuno. Kanye ngalo mzuzu kwavakala *unkqo, nkqo, nkqo* kumnyango wangaphambili. Wavula ucango waza wabona kumi inkwenkwana.

"Aaah," he said, "you are the boy who always asked for seeds."

"Yes," said the boy, "but I know you don't have a vegetable garden now. Can I help you plant one?"

And, for the second time that day, Mr Shabalala had tears in his eyes. But this time they were tears of happiness.

Umhla:_____

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School:_____

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Surname:_____

Isidlo – learners' copy'

UTata uNdlela wayengumlobi. Kodwa, iintlanzi zazingeninzanga njengokuba kwakunjalo kudala, kwaye ngezinye iimini wayekhe abuye nelize. Xa kunjalo, isi-aram esinguTata uNdlela sasiye sizive sikhathazeke kakhulu.

Xa kunjalo uMama uNdlela wayeye amange aze athi, "Kuza kulunga, soze silale singatyanga." USanele noFikile babeye bongeze ngelithi, "Icebo liyazakha Tata, zange silale singatyanga." Ngokwenene kwakusoloko kunjalo kuba akukho namnye owayelima iitumato ezibomvu, iipepile eziluhlaza, iminqathe ekramkram kunye nekhaphetshu eligramgram ukodlula uTata uNdlela, encediswa nguSanele noFikile.

And no one, absolutely no one, could turn the reddest tomatoes, the greenest peppers, the crunchiest carrots and the crispiest cabbage into a more scrumptious meal than Mama Ndlela, with the help of Sanele and
Fikile!

One lucky day, Tat 'uNdlela caught five fish. He sold four and kept one to take home for dinner.
As Tat 'uNdlela passed Maria's shop she called out, "How much for the fish?"
"Sorry, Maria," said Tat 'uNdlela, "but this one is for our dinner."

"What if," asked Maria, "you took something different home, something like these sausages? Now wouldn't that be a real treat? Ayinakuba yinto emnandi na leyo?"

UTata uNdlela wacinga umzuzwana, kodwa yaba ngumzuzwana nje kuphela kuba iisoseji zazikhangeleka zimnandi ngokwenene! Ngoko ke, uSisi Mariya noTata uNdlela batshintshiselana waze uTata uNdlela wakhawuleza ukugoduka.

Kwabakho uchulumanco olukhulu xa uTata uNdlela axelela uMama uNdlela, uSanele noFikile malunga nosuku lwakhe lwethamsanqa. Kwakungathi uze nobutyebi ekhaya; kwaye ke, ngokwenene wayeze nabo, ngenye indlela.

UMama uNdlela wazikhuphela kweyona pleyiti yakhe intle iisoseji wazibeka ekhabhathini. Wayeyazi kakuhle into awayeza kuyenza ngazo. Wayeza kwenza eyona *Chakalaka* yakhe yamnandi, aze athi akugqiba, anqunqe iisoseji azizamisele kuyo. Ngaloo ndlela yayiza kuba ngathi zininzi kakhulu.

Mama Ndlela chopped and sliced, diced and spiced, with the help of Sanele and Fikle.

Then, while Mama Ndlela added a little bit of this and quite a lot of that, Sanele and Fikile helped Tat' uNdlela set the table and pick a bunch of wild flowers to go on it.

Ekugqibeleni lafika ixesha lesidlo. What a dinner! Esinjani sona isidlo!

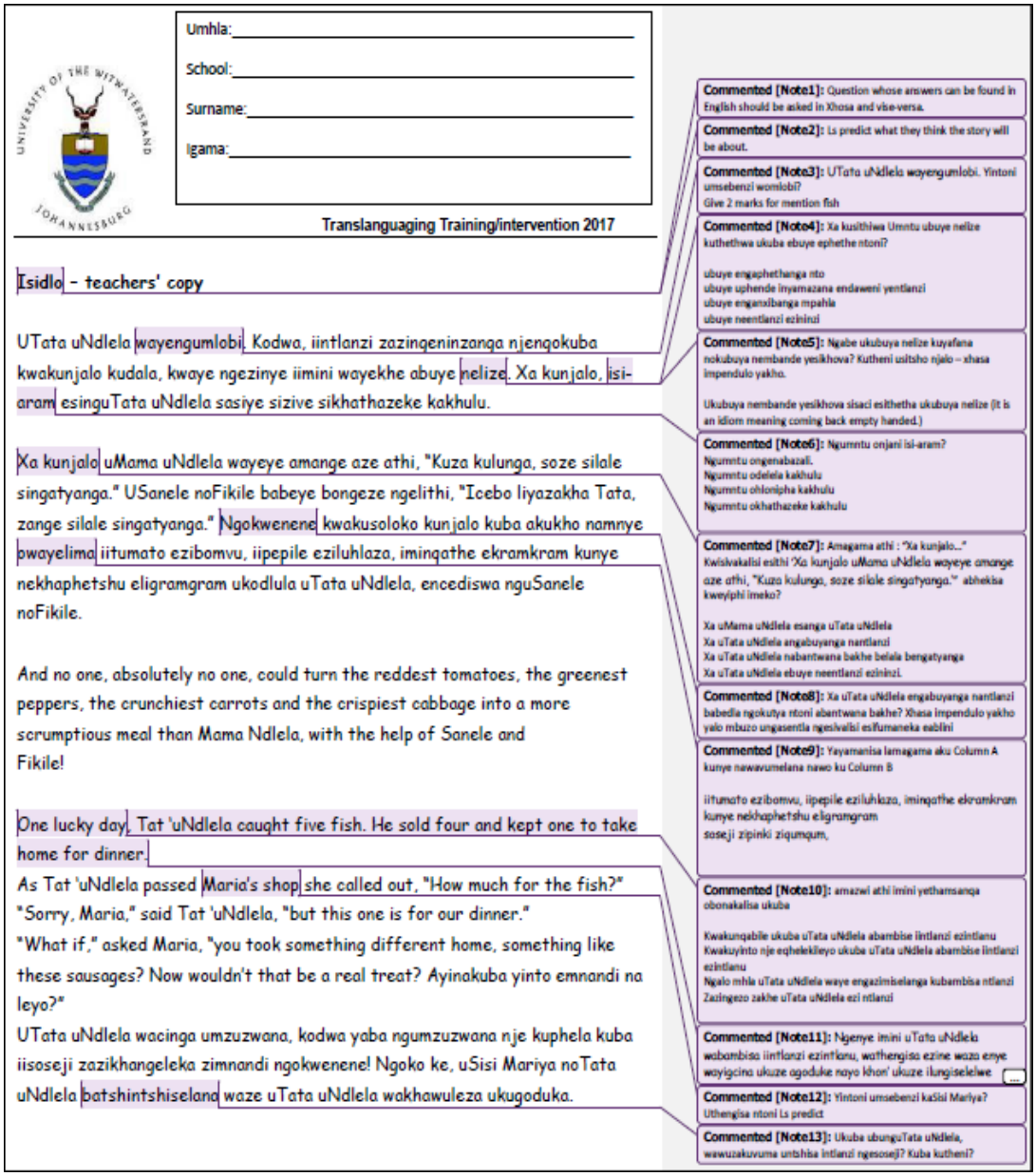
"Mh!" kutsho uSanele.

"Mh, mh!" kutsho uFikile.

And, "My, oh my . . . oh my!" said Tat' uNdlela, "I did not think it was possible, but le i*Chakalaka,* yeyona imnandi kunazo sonke owakha wazenza. Ezaa soseji zenze umahluko omkhulu!"

UMama uNdlela zange athethe. Kodwa, ukuba uTata uNdlela, uSanele noFikile babengaxakekanga besitya ukutya abazongeze kona, ngebabemvile xa wayesenza isingqala.

Mama Ndlela went quietly over to the kitchen cupboard.
She covered up the plump, pink sausages and wondered how she could possibly have forgotten to add them kwi*Chakalaka* yakhe.
Kodwa wabuya wacinga, "Sausages for breakfast. What a treat!. Kuza kuba mnandi kakhulu!"



Umhla:_____

School:_____

Surname:_____

Igama:_____

Translanguaging Training/intervention 2017

[sidlo - teachers' copy

UTata uNdlela wayengumlobi. Kodwa, iintlanzi zazingeninzanga njengokuba kwakunjalo kudala, kwaye ngezinye iimini wayekhe abuye nelize. Xa kunjalo, isi-aram esinguTata uNdlela sasiye sizive sikhathazeke kakhulu.

Xa kunjalo uMama uNdlela wayeye amange aze athi, "Kuza kulunga, soze silale singatyanga." USanele noFikile babeye bongeze ngelithi, "Icebo liyazakha Tata, zange silale singatyanga." Ngokwenene kwakusoloko kunjalo kuba akukho namnye bwayelima iitumato ezibomvu, iipepile eziluhlaza, iminqathe ekramkram kunye nekhaphetshu eligramgram ukodlula uTata uNdlela, encediswa nguSanele noFikile.

And no one, absolutely no one, could turn the reddest tomatoes, the greenest peppers, the crunchiest carrots and the crispiest cabbage into a more scrumptious meal than Mama Ndlela, with the help of Sanele and Fikile!

One lucky day, Tat 'uNdlela caught five fish. He sold four and kept one to take home for dinner.
As Tat 'uNdlela passed Maria's shop she called out, "How much for the fish?"
"Sorry, Maria," said Tat 'uNdlela, "but this one is for our dinner."
"What if," asked Maria, "you took something different home, something like these sausages? Now wouldn't that be a real treat? Ayinakuba yinto emnandi na leyo?"
UTata uNdlela wacinga umzuzwana, kodwa yaba ngumzuzwana nje kuphela kuba iisoseji zazikhangeleka zimnandi ngokwenene! Ngoko ke, uSisi Mariya noTata uNdlela batshintshiselana waze uTata uNdlela wakhawuleza ukugoduka.

Commented [Note1]: Question whose answers can be found in English should be asked in Xhosa and vise-versa.

Commented [Note2]: Ls predict what they think the story will be about.

Commented [Note3]: UTata uNdlela wayengumlobi. Yintoni umsebenzi womlobi?
Give 2 marks for mention fish

Commented [Note4]: Xa kusithiwa Umntu ubuye nelize kuthethwa ukuba ebuye ephethe ntoni?

ubuye engaphethanga nto
ubuye uphende imyamazana endaweni yentlanzi
ubuye engantlbanga mpahla
ubuye neentlanzi ezininzi

Commented [Note5]: Ngabe ukubuya nelize kuyafana nokubuya nembande yesikhova? Kutheni usitsho njalo – xhasa impendulo yakho.

Ukubuya nembande yesikhova sisaci esithetha ukubuya nelize (it is an idiom meaning coming back empty handed.)

Commented [Note6]: Ngumntu onjani isi-aram?
Ngumntu ongenabazali.
Ngumntu odelela kakhulu
Ngumntu ohlonipha kakhulu
Ngumntu okhathazeke kakhulu

Commented [Note7]: Amagama athi : "Xa kunjalo..." Kwisivakalisi esithi "Xa kunjalo uMama uNdlela wayeye amange aze athi, "Kuza kulunga, soze silale singatyanga." abhekisa kweyiphi imeko?

Xa uMama uNdlela esanga uTata uNdlela
Xa uTata uNdlela engabuyanga nantlanzi
Xa uTata uNdlela nabantwana bakhe belala bengatyanga
Xa uTata uNdlela ebuye neentlanzi ezininzi.

Commented [Note8]: Xa uTata uNdlela engabuyanga nantlanzi babedla ngokutya ntoni abantwana bakhe? Xhasa impendulo yakho yalo mbuzo ungasentla ngesivakisi esifumaneka eablini

Commented [Note9]: Yayamanisa lamagama aku Column A kunye nawavumelana nawo ku Column B

iitumato ezibomvu, iipepile eziluhlaza, iminqathe ekramkram kunye nekhaphetshu eligramgram
soseji zipinki ziqumqum,

Commented [Note10]: amazwi athi imini yethamsanqa obonakalisa ukuba

Kwakunqabile ukuba uTata uNdlela abambise iintlanzi ezintlanu
Kwakuyinto nje eqhelekileyo ukuba uTata uNdlela abambise iintlanzi ezintlanu
Ngalo mhla uTata uNdlela waye engazimiselanga kubambisa ntlanzi
Zazingezo zakhe uTata uNdlela ezi ntlanzi

Commented [Note11]: Ngenye imini uTata uNdlela wabambisa iintlanzi ezintlanu, wathengisa ezine waza enye wayigcina ukuze agoduke nayo khon' ukuze ilungiselelwe ...

Commented [Note12]: Yintoni umsebenzi kaSisi Mariya? Uthengisa ntoni Ls predict

Commented [Note13]: Ukuba ubunguTata uNdlela, wawuzakuvuma untshisa intlanzi ngesoseji? Kuba kutheni?

Kwabakho uchulumanco olukhulu xa uTata uNdlela axelela uMama uNdlela, uSanele noFikile malunga nosuku lwakhe lwethamsanqa. Kwakungathi uze nobutyebi ekhaya; kwaye ke, ngokwenene wayeze nabo, ngenye indlela. UMama uNdlela wazikhuphela kweyona pleyiti yakhe intle iisoseji wazibeka ekhabhathini. Wayeyazi kakuhle into awayeza kuyenza ngazo. Wayeza kwenza eyona *Chakalaka* yakhe yamnandi, aze athi akugqiba, anqunqe iisoseji azizamisele kuyo. Ngaloo ndlela yayiza kuba ngathi zininzi kakhulu.

Mama Ndlela chopped and sliced, diced and spiced, with the help of Sanele and Fikle.
Then, while Mama Ndlela added a little bit of this and quite a lot of that, Sanele and Fikile helped Tat' uNdlela set the table and pick a bunch of wild flowers to go on it.

Commented [Note14]: Who are Sanele and Fikile?

Ekugqibeleni lafika ixesha lesidlo. What a dinner! Esinjani sona isidlo!
"Mh!" kutsho uSanele.
"Mh, mh!" kutsho uFikile.
And, "My, oh my . . . oh my!" said Tat' uNdlela, "I did not think it was possible, but le i*Chakalaka*, yeyona imnandi kunazo sonke owakha wazenza. Ezaa soseji zenze umahluko omkhulu!"

Commented [Note15]: Isivakalisi esithi "Esinjani sona!" sivakalisa ukuba sasinjani isidlo?

Sasimnandi
Sasibi
Sasikhulu
Sasincinci

UMama uNdlela zange athethe. Kodwa, ukuba uTata uNdlela, uSanele noFikile babengaxakekanga besitya ukutya abazongeze kona, ngebabemvile xa wayesenza isingqala.

Commented [Note16]: Waye esenziswa yintoni isingqala uMama uNdlela

Commented [Note17]: Who can make isingqala

Mama Ndlela went quietly over to the kitchen cupboard.
She covered up the plump, pink sausages and wondered how she could possibly have forgotten to add them kwi*Chakalaka* yakhe.
Kodwa wabuya wacinga, "Sausages for breakfast. What a treat!. Kuza kuba mnandi kakhulu!"

Umhla:_____

_____

School:_____

_____

Surname:_____

Read the story below and answer the question that follow

The Ungrateful Lion

In a dense forest, lived a fierce lion. He was very cruel. One day the lion was caught in a hunter's cage. One by one many animals passed by. "Please helped me!" pleaded the lion. But none of the animals listened to his plea.

After a while, a man happened to come into the forest. He saw the lion. The lion said, "I will die of hunger and suffocation. Please help me out, O! kind man." The man was thoughtful. "I assure you I will never harm you. Please help me now. The hunter will be anytime now," said the lion.

The man felt sorry for the lion and set the beast free. As soon as the lion was free, he let out a fierce roar. "I have been trapped in the cage for a long time. I am hungry. I will have to eat you," said the lion, looking at the man. "But you promised that you would not harm me," said the man, in a meek tone. "Yes, I said that. But only to convince you to free me. Now, I am terribly hungry," said the lion.

The terrified man thought quickly. He said, "Alright, you can eat me. But let a judge decide if you are right in eating the person who has rescued you."

The lion agreed. He was sure that no animal would speak against him. Just then a jackal came that way and the lion asked the jackal to be the judge. He addressed the lion, "Sir, would you please show me how it all happened?" The lion was only too willing. He entered the cage and closed the cage door. The jackal immediately bolted the cage from outside.

"Now the lion is trapped again. Run away, you foolish man! And never offer help to

anyone without thinking," said the jackal. The frightened man ran for his life. And the ungrateful lion was trapped in the cage again. The hunter came and took the lion away to his circus.

Umhla:_____

_____

School:_____

_____

Surname:_____

Translanguaging Training/intervention 2017

Read the story below and answer the question that follow

The Judge Monkey

Once upon a time, two cats were passing through a street. Suddenly they spotted a loaf of bread lying beneath a tree. Both pounced upon it and caught the loaf at the same time. "It is mine. I saw it first," claimed one cat. While the other said, "I pounced upon it first and so it belongs to me." After having fought for a while, one cat said, "Let us divide it into two and take one piece each." "Indeed, a good idea," said the other cat. "But how do we divide it now?"

A monkey sitting on the branch of the tree had watched all that happened between the two cats. "That loaf of bread looks good. I could do with it myself," he thought. Slowly he came down from the tree and walked up to the confused cats.

"Yes, my dear friends! Can I help you?" asked the monkey. The cats told the monkey what the problem was and said, "Why do not you be the judge between us?" When the monkey nodded, the cats said, "Please divide this loaf for us."

The clever monkey smilingly broke the bread into two pieces. But one piece was a little bigger that the other. "OH no! I will take a little bite of this bigger piece to make both equal," said the monkey, slyly. He took a bite from the bigger piece. But, he had taken a big bite. "Uh oh! Now it has become smaller

than the other piece. I will just have to take a little bite from this piece now," said the clever monkey.

The Judge Monkey took another bite. The two cats sat in front of the monkey, seeing the loaf of bread they had found getting smaller and smaller. When the whole loaf was eaten by the monkey, the monkey said, “I am sorry. I was really difficult to divide that loaf. I must be going now." And the monkey jumped onto the tree and was gone. “If only we had not quarrelled among ourselves, we would have remained united and we need not have to go to the monkey and to become hungry now," said the two cats.

Appendix 13 – Parent/Guardian consent letter - English

The Division of Languages, Literacies and Literature
WITS SCHOOL OF EDUCATION
Johannesburg
Tel: +27 11 717-3002 • Fax: +27 11 717-3215
Website: www.wits.ac.za

Dear Parent/Guardian

My name is Vukile Mgijima, and I am a PhD candidate in the Faculty of Humanity at the University of the Witwatersrand.

I have been granted permission by the principal at your child's school to conduct research about the effectiveness of using two languages, isiXhosa and English, simultaneously to teach reading in Grade 4. I would like you to please permit your child to be part of the research.

My research involves interviewing teachers who teach reading to Grade 4 learners. I will use a voice recorder to record the interviews; I will also assess reading to Grade 4 learners using isiXhosa and English.

I would also like to let you know that

- Participation in the research is voluntary;
- Only learners who consent and whose parents consent will participate in the project;
- You or your child may decide to withdraw from participating at any time without penalty;
- All information obtained will be treated in strictest confidence;
- The school and learners' names will not be mentioned in any written reports about the research;

- All the data collected during this study will be destroyed within 3-5 years after completion of my project.
- A report of the findings will be made available to the school.

If you DO NOT want your child to participate, please fill out the attached form and return to me at your child school. Should you need further information about this research project, feel free to contact me, or my research supervisor on the details provided below.

Thank you



Vukile Mgijima
No 47 Sialkot Crescent, Durban
Cell: 0835171447
Email: vukile.d.mgijima@gmail.com

Supervisor: Leketi Makalela
Tel: +27 11 717-3002
Fax: +27 11 717-3215
E-mail: Leketi.Makalela@wits.ac.za

Appendix 14 - Parent Consent/Object Form - English

The Division of Languages, Literacies and Literature
WITS SCHOOL OF EDUCATION
Johannesburg
Tel: +27 11 717-3002 • Fax: +27 11 717-3215
Website: www.wits.ac.za

03 August 2017

Parent Consent/Object Form

Please fill in the reply slip below if you agree that your child may participate in my study.

My name is: _____ and I am a parent/guardian to _____

I DO NOT agree that my child may participate in the research project as stated in the letter even though

- My name, my child's and the name of my child's school will not be mentioned in the research report.
- My child can withdraw from the study at any time without any penalty.
- All the data collected during this study will be destroyed within 3-5 years after completion of the research project.

Sign_____ Date_____

Appendix 15 - Parent Consent/Object letter - Xhosa

The Division of Languages, Literacies and Literature
WITS SCHOOL OF EDUCATION
Johannesburg
Tel: +27 11 717-3002 • Fax: +27 11 717-3215
Website: www.wits.ac.za

03 August 2017

Imvume

Mna (igama nefani yomzali) _____Ndingumzali ka (igama nefani yomfundi) _____Andithandi ukuba owam umntwana abandakanywe kweli linge

Signature: _____

Umhla (date) _____

The Division of Languages,
Literacies and Literature
WITS SCHOOL OF EDUCATION
Johannesburg
Tel: +27 11 717-3002 • Fax: +27 11 717-3215
Website: www.wits.ac.za

03 August 2017

Mzali

Igama lam ndingu Vukile Mgijima. Ndingumfundi eUniversity yaseWitwatersrand, eRhawutini

Ndifumene imvume kwinqununu yesikolo esifunda umntwana wakho ukuba ndenze uphando (research) lokuba kulungile kusini na ukuba abantwana bafundiswe ngelwimi ezimbini, isiXhosa nesiLungu, ngaxesha nye, eklasini enye. Ndicela undivumele nawe nje ngomzali womntwana ukuba ndimbandakanye nowakho umntwana kweli linge,

Kolu phando, ndizakubuza utitshala womntwana wakho imibuzo embalwa malunga nendlela afundisa ngayo abantwana ukufunda, nendlela avavanya ngayo esi sifundo kwibanga lesine (Grade 4).
Ndicela ukukwazisa oku kulandelayo:

- Uvumelekile ukuba ukhethe ukuvuma okanye wale ukuba umntwana wakho ndimbandakanye koluphando (okanye kule-research)
- Ngabantwana abanabazali abavumile ukuba babandakanywe abanelungelo lokuthatha inxaxheba koluphando.
- Inkcukacha malunga neziphumo zoluphando zizakugcinwa ziyimfihlo okanye zisetyenziswe kule-research kuphela.
- Akukho gama la mntu okanye elesikolo elizakukhankanywa kule-research neziphumo zayo.
- Iziphumo, nenkcukacha ngale-research, ndizakuzigcina, kanti zizakufumaneka esikolweni somntwana wakho; kodwa, zizakugcinwa iminyaka emithathu ukuya kwemihlanu, emva koko zitshatyalaliswe.

Ukuba awuthandi ukuba owakho umntwana abandakanywe kweli linge, ndicela undazise ngokubhala inkcukacha zakhe nezakho kwiphepha eli landelayo. Xa ufuna inkcukacha ezithe vetshe malunga nale-research, ungandifumana esikolweni somntwana wakho, okanye undifowunele kwezinombolo zibhalwe apha ngaphantsi kwegama lam.

Enkosi

Ndim obebhala

Vukile Mgijima
Inombolo yam: 0835171447

Appendix 16- Teacher consent

The Division of Languages, Literacies and Literature
WITS SCHOOL OF EDUCATION
Johannesburg
Tel: +27 11 717-3002 • Fax: +27 11 717-3215
Website: www.wits.ac.za

03 August 2017

Dear Teacher

My name is Vukile Mgijima, and I am a PhD candidate in the Faculty of Humanity at the University of the Witwatersrand.

I have been granted permission by the school principal to conduct research about the effectiveness of using two languages, isiXhosa and English, simultaneously to teach reading in Grade 4. I would like to invite you to be part of my research project.

My research involves interviewing teachers who teach reading to Grade 4 learners. I will use questionnaires and a voice recorder to record the interviews; I will also assess reading to Grade 4 learners using isiXhosa and English.

I would also like to let you know that

- Participation in the research is voluntary;
- Only learners who consent, and whose parents and teachers consent will participate in the project;
- You may decide to withdraw from participating at any time without penalty;
- All information obtained will be treated in strictest confidence;
- The school, your name and learners' names will not be mentioned in any written reports about the research;

- All the data collected during this study will be destroyed within 3-5 years after completion of my project.
- A report of the findings will be made available to the school.

Should you need further information about this research project, feel free to contact me, or my research supervisor on the details provided below.

Thank you



Vukile Mgijima
No 47 Sialkot Crescent, Durban
Cell: 0835171447
Email: vukile.d.mgijima@gmail.com

Supervisor: Leketi Makalela
Tel: +27 11 717-3002
Fax: +27 11 717-3215
E-mail: Leketi.Makalela@wits.ac.za

Appendix 17 – Permission: School Principals

The Division of Languages, Literacies and Literature
WITS SCHOOL OF EDUCATION
Johannesburg
Tel: +27 11 717-3002 • Fax: +27 11 717-3215
Website: www.wits.ac.za

03 August 2017

School Principal Consent Form

I hereby give consent for you to approach learners in Grades 4 and their teachers to invite them to participate in the research project about the effectiveness of using two languages, isiXhosa and English, simultaneously to teach reading in Grade 4.

I have read the Project Information Statement explaining the purpose of the research project and understand that:

- The role of the school is voluntary
- I may decide to withdraw the school's participation at any time without penalty
- Learners in Grade 4 and affected teachers will be invited to participate and that permission will be sought from them and also from their parents.
- Only learners who consent and whose parents consent will participate in the project
- All information obtained will be treated in strictest confidence.
- The school, teachers' and learners' names will not be mentioned in any written reports about the research;
- Participants may withdraw from the study at any time without penalty.
- A report of the findings will be made available to the school.
- I may seek further information on the project from

Vukile Mgijima
No 47 Sialkot Crescent, Durban
Cell: 0835171447
Email: vukile.d.mgijima@gmail.com

Supervisor: Leketi Makalela
Tel: +27 11 717-3002
Fax: +27 11 717-3215
E-mail: Leketi.Makalela@wits.ac.za

School name: MAHLUBI PRIMARY

Principal B. H · MBINGI **Signature:** B H MBINGI

School Stamp & Date:

DEPARTMENT OF EDUCATION
MAHLUBI PRIMARY SCHOOL
P.O BOX [illegible] 4730
2017 -07- 31
EMIS No: 200500527
PRINCIPAL: B H MBINGI

The Division of Languages, Literacies and Literature
WITS SCHOOL OF EDUCATION
Johannesburg
Tel: +27 11 717-3002 • Fax: +27 11 717-3215
Website: www.wits.ac.za

03 August 2017

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Vukile Mgijima
No 47 Sialkot Crescent, Durban
Cell: 0835171447
Email: vukile.d.mgijima@gmail.com

Supervisor: Leketi Makalela
Tel: +27 11 717-3002
Fax: +27 11 717-3215
E-mail: Leketi.Makalela@wits.ac.za

School name: SIJOKA SPS

Principal A.L. SITABA Signature:

School Stamp & Date:

DEPARTMENT OF EDUCATION
SIJOKA PRIMARY SCHOOL
P O BOX 606
MATATIELE 4730
26 JUL 2017
EMIS NO 200501105
PRINCIPAL:

The Division of Languages, Literacies and Literature
WITS SCHOOL OF EDUCATION
Johannesburg
Tel: +27 11 717-3002 • Fax: +27 11 717-3215
Website: www.wits.ac.za

03 August 2017

School Principal Consent Form

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Vukile Mgijima
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Cell: 0835171447
Email: vukile.d.mgijima@gmail.com

Supervisor: Leketi Makalela
Tel: +27 11 717-3002
Fax: +27 11 717-3215
E-mail: Leketi.Makalela@wits.ac.za

School name: MZONDWENI SPS

Principal N-L. MAGADLA Signature:

School Stamp & Date: 31-07-2017

DZONDWENI S.P.S
31 -07- 2017

The Division of Languages, Literacies and Literature
WITS SCHOOL OF EDUCATION
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03 August 2017

School Principal Consent Form

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Vukile Mgijima
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Supervisor: Leketi Makalela
Tel: +27 11 717-3002
Fax: +27 11 717-3215
E-mail: Leketi.Makalela@wits.ac.za

School name: MABAZIJONGENE J.S.S.

Principal J.M. SITHOLE Signature:

School Stamp & Date:

MABAZIJONGENE J.S.S
P.O. BOX 100
MATATIELE 4730
DATE: 03-08-2017
SIGNATURE: