

Language proficiency and reading ability as predictors of academic performance of Grade 7
English second language students in submersion contexts

by

JULIE-ANN LENDRUM

submitted in accordance with the requirements for
the degree of

MASTER OF ARTS WITH SPECIALISATION IN TESOL
(TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES)

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROFESSOR B M NCHINDILA

NOVEMBER 2014

Student number: **06256945**

I declare that **LANGUAGE PROFICIENCY AND READING ABILITY AS PREDICTORS OF ACADEMIC PERFORMANCE OF GRADE 7 ENGLISH SECOND LANGUAGE STUDENTS IN ENGLISH SUBMERSION CONTEXTS** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher institution.

SIGNATURE
(Ms)

DATE

ACKNOWLEDGEMENTS

I would like to thank the following people for their assistance, support and contribution to the completion of this dissertation:

- Professor Bernard Nchindila, my supervisor, for his prompt feedback, patience and guidance.
- Dr André Botha, the educational psychologist at the school where I teach, for his encouragement and for being a sounding board for my concerns.
- The learners at Winchester Ridge Primary School who participated in the study and who inspire me.
- My parents, Keith and Merle, and my siblings, Carey, Clayton and Douglas for always listening and for being there to support and encourage me.
- Tsitsi Makina, for editing my dissertation and for providing prompt and professional feedback.

ABSTRACT

In South Africa learners do not achieve as well as their international counterparts on tests of literacy, and language proficiency is often blamed for their poor academic performance. In this study, the relationship between English language proficiency, reading ability and the academic performance of Grade 7 students in submersion contexts was investigated using quantitative methods. The participants of the study were Grade 7 students based in a former Model C school in the South African city of Johannesburg. Their English language proficiency and reading ability were measured by means of *The Proficiency test English Second Language: Intermediate level* and the *Neale Analysis of Reading Ability* tests respectively. The students' performance on these tests was correlated with the students' average summative assessment results using the Pearson-product moment correlation. Results showed that both English language proficiency and reading ability were significantly correlated with academic performance, with language proficiency having the most robust correlation. These findings indicate that teachers should aim at improving language proficiency by using multilingual teaching strategies that support home language as a cognitive tool.

KEY TERMS

English Second Language students; Academic performance; English language proficiency; English reading ability; Submersion contexts; Primary school learners; Content and language integrated learning; Bilingualism; Multilingualism; Linguistic interdependence; Bilingual teaching; Multilingual teaching

LIST OF ABBREVIATIONS USED IN THE STUDY

ANA	Annual National Assessments
ANOVA	Analysis of Variance
BICS	Basic Interpersonal Communication Skills
CALP	Cognitive Academic Language Performance
CAPS	Curriculum and Assessment Policy Statement
DBE	Department of Basic Education
DET	Department of Education and Training
DIME	Direct and Inferential Mediation Model
EAL	English Additional Language
ESL	English Second Language
FAL	First Additional Language
GDE	Gauteng Department of Education
GDP	Gross Domestic Product
HL	Home Language
HoA	House of Assembly
HoD	House of Delegates
HoR	House of Representatives
HSRC	Human Sciences Research Council
L1	First Language
L2	Second Language
LAD	Language Acquisition Device
LiEP	Language-in-Education Policy
LOLT	Language of Learning and Teaching
MEDUNSA	Medical University of South Africa
MT	Mother Tongue
NARA	Neale Analysis of Reading Ability
NCS	National Curriculum Statement
PIRLS	Progress in Reading Literacy Study
RNCS	Revised National Curriculum Statement
RSA	Republic of South Africa
SACMEQ	Southern and East African Consortium for Monitoring Educational Quality

SAIIR	South African Institute of Race Relations
SAL	Second Additional Language
SES	Socio-economic Status
SGB	School Governing Body
SPSS	Statistical Package for the Social Sciences
TL	Target Language
TOAL	Test of Adolescent Language
UNESCO	United National Educational, Scientific and Cultural Organisation
UNISA	University of South Africa
WORD	Wechsler Objective Reading Dimensions Test of Reading Comprehension

LIST OF TABLES USED IN THE STUDY

Table 1.1	Stanine ranking	27
Table 2.1	Inference taxonomy	70
Table 3.1	Skills tested in the Proficiency test <i>English Second Language: Intermediate level (Reinecke, 1992)</i>	96
Table 3.2	Research instruments used to measure variables in the pilot and main study	103
Table 3.3	Academic groups distinguished with respect to academic performance in the pilot study and the main study	111
Table 4.1	Pilot Study ($n=18$) Summative assessment marks for 10 learning areas, summative assessment marks for Mathematics and Social Sciences.	116
Table 4.2	Main Study ($n=26$) Summative assessment marks for 10 learning areas, summative assessment marks for Mathematics and Social Sciences	118
Table 4.3	The grouping of learners in the sample for the pilot study ($n=18$) and main study ($n=36$)	121
Table 4.4	Participants achievement in the <i>Proficiency test English Second Language Intermediate level (Reinecke, 1992)</i> in the pilot study ($n=18$)	123
Table 4.5	Participants achievement in the <i>Proficiency test English Second Language Intermediate level (Reinecke, 1992)</i> in the main study ($n=36$)	125

Table 4.6	Performance in Mathematics of the three groups in the pilot study	130
Table 4.7	Performance in Mathematics of the three groups in the main study	132
Table 4.8	Performance in Social Sciences of the three groups in the pilot study (<i>n</i>=18)	135
Table 4.9	Performance in Social Sciences of the three groups in the main study (<i>n</i>=36)	136
Table 4.10	Pearson product-moment correlations between overall academic performance, performance in Mathematics and Social Sciences, and performance on <i>the Proficiency test English Second Language: Intermediate level (Reinecke, 1992)</i>	139
Table 4.11	Learner performance on the comprehension component of the <i>Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)</i> in the pilot study (<i>n</i>=18)	141
Table 4.12	Learner performance on the comprehension component of the <i>Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)</i> in the main study (<i>n</i>=36)	143
Table 4.13	Pearson product-moment correlations between overall academic performance in Mathematics and Social Sciences, and performance on the <i>Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)</i>-Comprehension component	149
Table 4.14	Learners performance on the reading accuracy component of the <i>Neale Analysis of Reading Ability (NARA III, Australian</i>	

Table 4.15 Learner performance on the reading accuracy component of the *Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) in the main study (n=36)* 152

Table 4.16 Pearson product-moment correlations between overall academic performance, performance in Mathematics and Social Sciences, and performance on the *Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)*-Reading accuracy (Decoding component) 158

Table 4.17 Relationships between English language proficiency, English reading comprehension and academic performance in terms of Pearson product-moment correlations in the pilot and main study. 162

LIST OF FIGURES USED IN THE STUDY

Figure 2.1	The relationship between English language proficiency, English reading ability and academic performance	85
Figure 4.1	Average (%) performance of the groups in the pilot study (<i>n</i> =18)	122
Figure 4.2	Average (%) performance of the groups in the main study (<i>n</i> =36)	122
Figure 4.3	Performance of each of the three groups in the pilot study (<i>n</i> =18) on the <i>Proficiency test English Second Language: Intermediate level (Reinecke, 1992)</i>	128
Figure 4.4	Average (%) performance of each of the three groups in the main study (<i>n</i> =36) on the <i>Proficiency test English Second Language: Intermediate level (Reinecke, 1992)</i>	129
Figure 4.5	Average (%) performance of each of the three groups in the pilot study (<i>n</i> =18) on the reading comprehension aspect of the <i>Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)</i>	146
Figure 4.6	Average (%) performance of the three groups in the main study (<i>n</i> =36)	147
Figure 4.7	Average (%) performance of the three groups in the pilot study (<i>n</i> =18) on the reading accuracy aspect of the <i>Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)</i>	155
Figure 4.8	Average (%) performance of the three groups in the main study (<i>n</i> =36) on the reading accuracy aspect of the <i>Neale</i>	

Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) 156

Figure 4.9 Comparison of the average (%) performance of the three groups in the pilot study ($n=18$) on the reading accuracy and reading comprehension aspects of the *Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)* 159

Figure 4.10 Comparison of the average (%) performance of the three groups in the main study ($n=36$) on the reading accuracy and reading comprehension aspects of the *Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)* 160

Figure 4.11 Comparison of the average (%) of the three groups in the pilot study ($n=18$) on the reading accuracy and reading comprehension aspects of the *Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)* and in performance on the *Proficiency test English Second Language: Intermediate level (Reinecke, 1992)* 164

Figure 4.12 Comparison of the average (%) performance of the three groups in the main study ($n=36$) on the reading accuracy and reading comprehension aspects of the *Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)* and in performance on the *Proficiency test English Second Language: Intermediate level (Reinecke, 1992)* 165

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

1.1	Background	1
1.2	The focus of enquiry	3
1.3	The context of the research problem	3
1.4	The research problem	11
	1.4.1 Overview of the conceptual framework of the study	11
	1.4.2 Research aims	15
	1.4.3 Purpose of the study	16
	1.4.4 Research question	16
1.5	Research design	19
	1.5.1 Reliability and validity	20
	1.5.2 The participants	24
	1.5.3 Data collection procedures	26
	1.5.3.1 Academic performance	26
	1.5.3.2 English language proficiency	27
	1.5.3.3 English reading ability	28
	1.5.4 Data analysis	28
	1.5.5 Ethical considerations in the research context	28
1.6	Rationale of the study	29
1.7	Definition of terms	33

1.8	The structure of the rest of the study	36
------------	---	-----------

CHAPTER TWO

LITERATURE REVIEW

2.1	Introduction	38
2.2	Literacy levels and the academic achievement of primary school learners in South Africa	38
	2.2.1 Language-in-Education Policy (LiEP)	42
2.3	English language Proficiency and academic performance	46
	2.3.1 What exactly is language proficiency?	46
	2.3.2 Language acquisition and language learning	50
	2.3.3 The relationship between English language proficiency and academic success	55
	2.3.4 Socio-economic status (SES) and English language proficiency	61
2.4	English reading ability	63
	2.4.1 What is reading ability?	63
	2.4.2 Reading comprehension	67
	2.4.3 The role of inferencing in reading ability	69
	2.4.4 Second language oral proficiency and second language literacy	74
	2.4.5 English reading ability and academic performance	78
2.5	Conceptual Framework	83
2.6	Conclusion	86

CHAPTER THREE

METHOD

3.1	Introduction	87
------------	---------------------	-----------

3.2	The research design	87
	3.2.1 Aims of the study	89
	3.2.2 Research question	91
	3.2.3 Hypothesis	92
3.3	Methodology	93
	3.3.1 Research validity and reliability	94
	3.3.2 Research population	103
	3.3.3 Sampling technique	106
	3.3.4 Data collection	109
	3.3.5 Data analysis	110
3.4	Limitations	112
3.5	Ethical considerations	113
3.6	Conclusion	114

CHAPTER FOUR

FINDINGS

4.1	Introduction	115
4.2	Academic Performance	115
	4.2.1 What is the academic performance of Grade 7 ESLs in submersion contexts?	116
4.3	English language proficiency and academic performance	123
	4.3.1 English language proficiency and Mathematics	130
	4.3.2 English language proficiency and Social Sciences	134
4.4	English reading ability and academic performance	140

4.4.1	English reading comprehension ability and academic performance	140
4.4.2	English reading comprehension ability and Mathematics	147
4.4.3	English reading comprehension ability and Social Sciences	148
4.5	English reading decoding ability and academic performance	150
4.5.1	English reading decoding ability and Mathematics	157
4.5.2	English reading decoding ability and Social Sciences	157
4.6	The significance of English language proficiency and English reading ability to academic performance	161
4.7	Conclusion	166

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1	Introduction	168
5.2	Recapitulation of the aims, research questions and the methodology of the study	168
5.3	Interpretations and conclusions	172
5.4	Limitations of the study	178
5.5	Recommendations of the study	180
5.5.1	Recommendations for teacher practice	181
5.5.2	Recommendations for further studies	187
5.6	Conclusion	188
5.7	References	191

APPENDIX 1	206
APPENDIX 2	209
APPENDIX 3	211
APPENDIX 4	217
APPENDIX 5	222

Chapter one

INTRODUCTION

1.1 Background

In South Africa, learners complete 7 years of schooling in primary school. After that, they complete 5 years of schooling in secondary school. At the end of 12 years of schooling, learners write an exam which gives them the minimum qualification to apply for entrance into university. Examinations are written at the end of their final year of high school, namely Grade 12 and the qualification obtained is known as matriculation. A lot of focus is placed on the matriculation results as the pass rate of the matriculation exam is considered as indicative of the relative success or failure of the education system as a whole. In South Africa, matriculation pass rates remain unacceptably low and tertiary institutions complain about the poor literacy skills and language proficiency of learners. This study focuses on the literacy skills and language proficiency of Grade 7 learners who are in their final year of primary school. It is believed that insights gained from a study of learners in their exit year of primary school may assist teachers to implement strategies earlier on in the school life of a child so that when the child exits the school system after Grade 12 the learner may have the literacy and language skills necessary for tertiary study.

Govender in the *Sunday Times* (January 10, 2010) reports that poor English skills are regarded as the major factor behind the poor matriculation results, as the majority of learners have to study in English even though it is not their home language. He further states that the South African government believes that there must be an improvement in teaching English and that children need to be exposed to English at a younger age. As a result there has been an overhaul of the South African Education system with the introduction of the *Curriculum and Assessment Policy Statement (CAPS)* in 2011, where it is stipulated that children should be exposed to English at an earlier stage by introducing the language as a fourth subject from Grades R to 3. Therefore, it is clear that the blame for the current academic performance of matriculants has been laid firmly at the door of poor English language proficiency. Masondo in the *City Press* (July 21, 2013) reports that

the Annual National Assessments (ANA) carried out on South African schoolchildren in Grades 3, 6, and 9 indicate that the majority of South African schoolchildren are functionally illiterate. The Diagnostic Report on the Annual National Assessments 2012 (Department of Education, 2012) indicates that most learners from the grades surveyed could not understand what they read, nor could they produce meaningful and correctly punctuated sentences. They could not make inferences from what they had read and their knowledge of grammar was very limited.

Clearly, the language ability of learners is an important factor with respect to the academic achievement of South African learners. Understanding the nature of the challenges learners experience and the source of language difficulties, can assist teachers in implementing strategies or teaching approaches that can assist learners in coping with the difficulty of learning in a language that is not their home language. Many educators tend to blame poor academic performance on poor language proficiency but Pretorius and Ribbens (2005) argue that this assumption needs to be challenged. They argue that the language debate often clouds the significant role that reading ability plays with respect to reading performance. It is reading that improves reading, and reading skills cannot be improved if there are no reading skills in the first place (Pretorius & Ribbens, 2005).

Pretorius and Ribbens (2005) cite Alderson (2000: 23, 24) to indicate that there is certainly a relationship between language proficiency and reading, and that a certain linguistic threshold is necessary for reading in an additional language. They further note, however that it is the notion that reading will improve if language improves that needs to be challenged and rather that it is reading that will improve reading and further enhance language proficiency. On the other hand a study by Nchindila (2011) suggests a relationship between phonological awareness and reading achievement in early childhood reading in English. This would indicate that reading ability is dependent on language ability and skills. Furthermore Van Rooyen and Jordaan (2009) show that language for academic purposes involves being able to understand and use classroom discourse, as well as being able to understand the educator's verbal instructions and lessons. Thus, an academic language proficiency and competence are also crucial in achieving academic success. This study aims to

revisit the debate regarding the role language proficiency plays in relation to academic performance and to revisit the role played by reading ability.

1.2 The focus of enquiry

This study focuses on learners in a multicultural school environment where English is the Language of Learning and Teaching (LOLT). Learners come from a diverse range of language backgrounds which include all eleven South African official languages. Some of the learners in the school context are English first language speakers while others are English second language (ESL) speakers. The majority of the ESL learners in this school context obtain their first literacy in English and not in their mother tongue or first language. A 'straight for English' approach is adopted where these learners are submerged in an English language learning environment. These learners may or may not be exposed to English at home and therefore often only hear English in the classroom context. They may also not necessarily speak English on the playground as they may select classmates who speak their home language and thus interact with them in that language outside of the classroom.

The study focuses on Grade 7 learners in particular because they are in their last year of primary school and are about to go to high school where being able to read and having a particular level of academic language proficiency is essential for learning. They will increasingly have the necessity to 'read to learn' and will also require the use of language for academic purposes. Thus, they need to be able to understand the language of textbooks and be able to use language in increasingly context reduced environments.

1.3 The context of the research problem

During the time of the Apartheid government in South Africa the education system was segregated and different funding and resources were made available for the different racial groups. Education for Indian children was managed by the House of Delegates (HoD), education for Coloured children was managed by the House of Representatives (HoR), education for Black children was managed by the Department of Education and Training (DET) and education for White children was

managed by the House of Assembly (HoA) (SAIRR, 2012). In 1990 the government announced that School Governing Bodies of white schools could opt to choose from three models of schools. Model A schools were totally private and received no funding from the government. Model B schools were State schools and were completely funded by the government while Model C schools were schools that were semi-private. Model C schools would receive a State subsidy and the remainder of their budget would come from fundraising, fees and donations (SAIRR, 2012). By April 1992, 96 % of white schools had become Model C schools (De Lange, 2011:6). These schools were well resourced and learners at these schools would more than likely have access to computer laboratories, science laboratories, libraries and would have readers and textbooks readily available. Thus, Model C schools became “islands of privilege” where those who could afford to pay had access to resources and quality education (Williams, 2011:1).

Prior to 1994, the Apartheid Language-in-Education policy encouraged multilingualism with the express purpose of dividing and segregating ethnic groups. Education in African languages was inferior and under-resourced. As Raidt notes (1999 in Broom, 1994:507), African languages became associated with a lack of socio-economic empowerment and oppression. The languages spoken by the majority of the population came to be regarded as inferior and were seen as hindering upward mobility and access to the job market and education. The ex-colonial language, English, was in turn seen as an “open sesame” (Kamwangamalu, 2003:68) and as the means by which an improved quality of life could be accessed. English provided access to education and the job market. Afrikaans, while also providing opportunities for social and economic advancement was seen as the language of the oppressor and thus the perception of English above all else prevailed. This legacy still pervades perceptions of language in education today.

In 1994 Apartheid education was desegregated and the new South African Constitution (RSA, 1996a art 29, cited in De Wet, 2002:119) and the South African Schools Act (RSA, 1996b art 6, cited in De Wet, 2002:119) acknowledged the right of all learners to receive education in the language of their choice (De Wet, 2002). It is also the goal of the current education policy that all learners have equal access to

education and that they have meaningful interaction with the curriculum. De Wet (2002) cites numerous studies that indicate that the home language is the most appropriate means to impart the skills of reading and writing, especially in the first few years of schooling. Thus, if learners are to have meaningful engagement with the curriculum they need to be initially taught in their first language (L1) or their mother tongue (MT). However, the status quo in terms of the hegemony of the English language with regard to tertiary education and its use in the workplace still places the emphasis on English as a means to achieving socio-economic success. The education policy has allowed parents represented by governing bodies to determine the LOLT adopted by schools. Many schools therefore teach the home language until Grade 4 and then the switch is made over to English. The premise is that curriculum will be taught in English and support will be given in the home language. The Language-in-Education Policy (LiEP) makes room for mother tongue education or “an additive approach to multilingualism” (Department of Education, 2002) where provision is made for all learners to learn their home language while becoming competent in an additional language.

However, in reality this is not the case. Moyo (2001) highlights additional problems associated with the limited success of the implementation of the Language-in-Education policy. He notes that there are not enough trained language teachers and most are ill equipped to teach English as the target language (TL). Less than 20% of teachers in South Africa are first language teachers (Moyo, 2001:106). Chick (1992:33) also notes that “black primary school pupils are not adequately prepared for the transition from mother-tongue instruction to English in Grade 5 which is concurrent with the curriculum broadening into 10 learning areas. Nor are most of the teachers effectively equipped to explain the new concepts in various subjects.” Moyo (2000) also notes that teachers who are trained in the learners’ mother tongue often continue teaching in their mother tongue when the medium is supposed to be English. When these learners sit for their matric examination, the language of the examination is English which in effect has not been used in the classroom.

Moyo (2000:109) also further highlights the fact that the cost of the “additive bilingualism” approach has hampered the meaningful implementation of the

curriculum. According to the tenets of additive bilingualism, the learner is allowed 50% of tuition in his/her mother tongue through schooling with an additional language. He notes that in order for this to happen, the learner will need to have two textbooks in different languages. The logistical and financial implications of this have resulted in problems with regard to learners having access to these textbooks and thus Moyo (2000: 110) concludes that the notion of “bilingual and multilingual education becomes a ‘powerful’ name game, as political rhetoric only pays lip service to it.”

Former Model C schools present a different scenario. School governing bodies; given a choice with regard to the LOLT have chosen the “straight for English” option where English is taught to all learners from Grade 1. These schools are often staffed by teachers who do not speak all of the learners’ home languages and hence very little support is given to learners with regard to the maintenance and support of their home language and culture. In addition to this, particularly in urban schools in the Gauteng region, learners are from a variety of home language backgrounds and therefore instruction in all of the learners’ home languages is logistically impossible. Learners have to adopt a “sink or swim” approach, where they have to learn to read in a language (i.e. English) in which they have limited oral proficiency and which is not their mother tongue. This ‘sink or swim’ approach is referred to as the ‘submersion’ approach to language learning.

Bilingual and multilingual classrooms are not unique to South Africa, there are second language learners around the world who also learn in a language that is not their mother tongue. These learning contexts, termed immersion contexts, can be further categorised into late immersion, shallow immersion, total immersion, deep immersion and submersion contexts.

Cummins (2000:1), in a review of 30 years of research on second language immersion indicates that the term “immersion education” came into use in Canada in the 1960s to refer to programs where the French language was used as a medium of instruction for students whose home language was English. Learners are taught content subjects in their L2 and are therefore exposed to authentic input in the

second language and thus can learn their additional language in a communicative context. He differentiates between three types of immersion programmes namely: early immersion which starts in kindergarten or Grade 1, middle immersion which starts in Grade 4 or 5 and late immersion which starts in Grade 7. All these programs are characterized by at least 50% instruction in the target language (French).

Thus, learners also get at least 50% tuition in their L1. The L1 is supported and encouraged. Learners also speak a majority language that they are exposed to and which is supported outside of the school context. Cummins (2000) further notes that the core features of immersion programs include the following:

- i. The L2 is the medium of instruction
- ii. The immersion curriculum parallels the local L1 curriculum
- iii. Overt support exists for the L1
- iv. The program aims for additive bilingualism
- v. Exposure to the L2 is largely confined to the classroom
- vi. Students enter with similar (and limited) levels of L2 proficiency
- vii. The teachers are bilingual
- viii. The classroom culture is that of the local L1 community

Clearly the South African context of L2 learning is different from the one described above. As noted previously, particularly in former Model C schools the teachers do not know, support or encourage L1 culture. There is no instruction conducted in the L1 and learners have varying levels of L2 proficiency. Their culture is not the majority language culture of the school and in the school context they find themselves in a minority speaker situation. Learners are not literate in their L1 but obtain their first literacy in an L2.

According to the national census in 2001 (Lewis, 2010:130) the distribution of language spoken in the home is as follows:

IsiZulu	23.8%
IsiXhosa	17.6%
Afrikaans	13.3%
Sepedi	9.4%
English	8.2%
Setswana	8.2%
Sesotho	7.9%
Xitsonga	4.4%
SiSwati	2.7%
Tshivenda	2.3%
IsiNdebele	1.6%
Other	0.5%

As is clear from the above isiZulu is the language spoken by the majority of South Africans. English is the home language of only 8.2% of all South Africans but in the educational context it is regarded as the “majority language” or L2. Particularly in urban schools in South Africa, learners come from diverse linguistic backgrounds and may have one or more of the above languages as their home language. Thus, in the case of an urban former Model C school in Gauteng it is difficult to indicate what the majority language culture would be in the community as learners represent a diverse range of linguistic and ethnic cultural backgrounds. Regionally, this may differ. There may be one particular language in the area that predominates. This language would then be the “majority language” in the particular region. Learners

however may attend schools that have English as the LOLT. In this case, in an educational context the “majority language” is granted minority status.

Thus, in many former Model C schools, English is the language of learning and instruction and is the second language (L2) of learners who represent a variety of home language backgrounds. Scheepers (2003) further indicates that in these schools all business and administrative communication is conducted in the L2. Teachers are not bilingual and thus the tenets of additive bilingualism are not encouraged or supported.

The additive bilingualism enrichment principle states that bilingualism can positively affect both intellectual and linguistic progress. Cummins (2000:5) cites numerous studies including those of Cummins and Swain (1986), Diaz (1986), Hakuta and Diaz (1985), and Ricciardelli (1989) which report that bilingual children exhibit a greater sensitivity to linguistic meanings and may be more flexible in their thinking than monolingual children.

Thus, Cummins concludes (2000:6) that “the development of additive bilingual and biliteracy skills entails no negative consequences for children’s academic, linguistic or intellectual development. On the contrary, although not conclusive the evidence points in the direction of subtle metalinguistic, academic and intellectual benefits for bilingual children.”

However, as outlined earlier, the immersion context of South African children is vastly different from that of the Canadian context. Canadian learners receive support for their L1 (English) while receiving content education in their L2 (French). The classroom culture that is maintained is that of their L1. As noted previously in many rural and township schools in South Africa a situation of “pseudo-immersion” (Hubbard, 1993 in Scheepers, 2003:24) prevails. The learners are in fact not taught in English as the teachers may not be proficient in English and the administration and communication of the school may be the predominant local language. Thus, English may in effect be like a foreign language where learners are not exposed to good quality input and where they have little opportunity to produce output. The South African context of former Model C schools has therefore been more aptly

termed a “submersion” context (Cummins, 1979:4). Learners do not get educational support in their L1 and they experience a subtractive form of bilingualism where L1 skills are replaced by an L2. Aarts and Verhoeven (1999:377) state that “submersion programs at school are usually set for children from a low socioeconomic background (*sic*) who speak a low status language. They follow a L2 literacy instruction approach with only limited support from the teacher or parents.”

The lacklustre academic performance of bilinguals in submersion contexts led to the development of what Cummins (1979) calls the “threshold hypothesis” and “linguistic-interdependence principle”. In fact the results of some of these submersion programs were said to result in “semilingualism” (Cummins, 1979:15) where the learner suffered cognitive disadvantages in both the L1 and the L2. The threshold hypothesis therefore suggests a threshold level of competence in both the L1 and L2 that must be attained, so as to avoid any cognitive disadvantage to the learner and not to affect any potential benefits that becoming bilingual could have on their cognitive growth.

The linguistic interdependence principle can be expressed as follows:

“To the extent that instruction in L_x is effective in promoting proficiency in L_x, the transfer of this proficiency to L_y will occur provided there is adequate exposure to L_y (either in school or environment) and adequate motivation to learn L_y.” (Cummins, 1981:29 in Cummins, 2000:7)

Thus, a case is made for instruction in the mother tongue for at least 4 or 5 years. Once a foundation is formed in the mother tongue, these skills can be transferred to the learning of the L2. Cummins (2000, cited in Pretorius & Mampuru, 2007: 39) asserts that there are over 150 empirical studies that show that additive bilingualism has positive effects on learners’ cognitive, linguistic and academic growth. While the South African Language-in-Education policy makes provision for this in theory, in practice it often occurs in name only. Particularly in former Model C schools, L2 learners develop no academic skills in their L1 before learning to read in a L2. Although L2 English learners in former Model C schools have been thought to

perform better than their counterparts in former State schools, they may still lag behind their L1 English peers in terms of academic skills.

Thus, this study is concerned with the academic performance of L2 English learners in a former model C school where learners from diverse multicultural and socio-economic backgrounds learn in a submersion context. Their first literacy is learned in a second language and no support is given to the learners' mother tongue. They learn English as a second language at the same time as they are using it to learn. The concern of this study is with the relationship between language proficiency and academic performance, and between reading ability and academic performance of learners in this context. Determining which of these variables is more robustly related to academic performance can assist teachers with strategies to assist learners in this daunting language environment. From Grade 4 onwards, learners increasingly need reading ability to learn. However while developing this competence, learners the primary school rely heavily on "teacher talk" and classroom discourse for learning. Thus, their proficiency in the LOLT would clearly be related to their academic success.

1.4. The research problem

The problem that the study seeks to address is the relationship between English language proficiency, reading ability and academic performance. The study is concerned with whether it is English language proficiency or reading ability that is most significantly related to academic performance.

1.4.1 Overview of the conceptual framework of the study

This study draws on Cummins' model of second language acquisition. Cummins (2000) notes how the issue of how language proficiency relates to the education of multilingual learners is highly relevant. In determining exactly what was meant by language proficiency and how it relates to academic achievement, Cummins made a distinction between the conversational and academic aspects of language proficiency. These two concepts were labelled by Cummins (1980) as Basic

Interpersonal Communication skills (BICS) and Cognitive Academic Language Proficiency (CALP).

Cummins (1980) indicates that children can acquire oral language proficiency in approximately two years. This is the competency that is needed to communicate within a context. This competency is needed for everyday life and is dependent on context or is context embedded. Cummins (2000) distinguishes a continuum where on the one end meaning can be actively negotiated by participants by making use of contextual clues while on the other end communication relies mostly on linguistic cues for meaning, and the successful negotiation of meaning relies on knowledge of the language itself (Cummins, 2000:4). He however indicates that it may take up to five to seven years for learners to acquire CALP which is context reduced and which relates to the competence that learners need to develop to succeed academically. Cummins (1980:77) also notes that CALP includes those aspects of proficiency that are most closely related to developing literacy in L1 and L2. It must be noted that CALP does not refer to developing literacy in a language. It is not merely a difference between oral and written language. It refers to being able to understand classroom discourse and refers to being able to write academic discourse as well as being able to read and understand the language of textbooks.

It stands to reason that it is important that learners have some level of BICS before developing CALP. Often however, learners who find themselves in submersion contexts arrive in Grade 1 with little or no BICS. Thus, they learn to read in a language which they cannot speak. This explains why L2 learners lag so far behind their L1 peers. It takes a matter of two or three years to develop communication skills that rely heavily on context including aspects such as eye contact, gestures and other verbal clues. Developing cognitive academic language proficiency takes much longer and this suggests the L2 speakers will always lag behind their L1 counterparts. The L1 learners are also developing their language skills and are therefore further able to develop their context reduced or academic language skills of which literacy is an integral part. As far as L2 learners are concerned they have a moving target, they will never catch up to their L1 peers as they are also constantly developing their context independent language skills.

It is the CALP aspect of language proficiency that this study is concerned with. When the term language proficiency is used, it is the context reduced proficiency that is referred to. This means that successful communication takes place purely a result of linguistic knowledge of the language. According to Cummins (cited in Lemmer, 2000:47, 48) this means that learners must be able to use a language to:

- Grasp concepts
- Establish relationships between concepts or information sets
- Analyse, synthesize, classify, store and retrieve information.
- Articulate information passed in oral and written form.

Gibbons (1991, cited in Cummins, 2000: 4) distinguishes between playground language and classroom language. Playground language is what enables children to make friends and take part in day-to-day activities. This language is different from classroom language, here higher order thinking skills such as hypothesizing, evaluating, inferring, generalizing, predicting or classifying are needed. Chamot (1996:109, cited in Lemmer, 2000:48) links the BICS/ CALP distinction to Bloom's taxonomy by using the image of an iceberg. Above the surface are the visible, measurable aspects of language skills such as pronunciation, vocabulary and grammar (BICS) which would enable a surface level of cognitive processing namely:

- Recall (remembering something previously encountered or learned)
- Comprehension (grasp of basic meaning without necessarily relating it to other material)
- Application (the use of abstractions in particular and concrete situations)

Under the surface are the deeper levels (CALP) which would involve:

- Analysis (breaking down a whole into its parts so that the organisation of elements is clear)
- Synthesis (putting elements into a coherent whole)
- Evaluation (judging the adequacy of ideas or material for a given purpose) (Lemmer, 2000:4)

Reading is certainly an aspect of classroom language. Reading comprehension implies a combination of linguistic knowledge and the complex relationships of a variety of cognitive strategies. Therefore reading involves a combination of bottom up and top down processing abilities. Therefore, the aim of reading is to arrive at meaning or understanding of the text. Cutting and Scarborough (2006:278) describe Gough and Tunmer's (1986 in Gough, 2005) influential simple view of reading which is seen as the product of decoding ability and listening comprehension. Decoding ability refers to the ability to decode the words of the text. It refers to understanding the phonetics, orthography and lexical elements of the text and is often termed bottom up processing. Listening comprehension on the other hand refers to the strategic competence required to analyse the syntactic and semantic relationship between the words to understand the text. This is referred to as top down processing. If there is any problem with the learner's decoding skills then the top down skills processing skills cannot be implemented and meaning will not be ascertained. If the decoding process is fine and there is no listening comprehension or problems with top down processing, meaning will also not be achieved. Thus, as Cutting and Scarborough (2006:278) indicate both of these are necessary but neither is sufficient on its own.

Cutting and Scarborough (2006) indicate that some children can be excellent decoders but are still weak comprehenders. Cutting and Scarborough (2006) give an account of numerous studies that show that only a very small percentage of school-age children who are weak comprehenders will actually show problems with regard to phonological processing deficits. Therefore their problems can be ascribed to problems with oral language processing or listening comprehension deficits. These would include problems related to oral proficiency and problems related to vocabulary and syntactic relationships.

Cutting and Scarborough (2006) conclude the simple view that reading is sufficient in that there seem to be no other factors except for reading speed that may influence reading besides decoding and listening comprehension. However, Beck and Carpenter (1986:1100) indicate that both cognitive and linguistic processes are

involved in reading. For example, readers not only relate to the information contained within a sentence but also within a text. Readers make references to items previously mentioned in the text and thus have to have an internal text memory skill to do so. Readers also have certain knowledge of the world which can be termed a 'schema' in which to slot what they read. Thus, a certain amount of the reader's own background knowledge and sociocultural bias affects reading comprehension. Readers also need to have an awareness of text structure and how it will be organised.

It is therefore the above conceptual views on language acquisition, language ability and reading that will form the basis of the study and how the terms of reading ability and language ability will be defined.

1.4.2 Research aims

Grade 7 learners in a submersion context have emerging CALP as they have been exposed to the academic context in English for five to seven years. These learners are in their first year of the senior phase and are thus in a situation where there is an increasing need to 'read to learn'. At the same time however, it may also be claimed that these learners are still in the process of learning their second language. These learners may only be exposed to English in the learning environment and may not have had any exposure to the language in their home context. Thus, learners may vary in terms of their exposure to the LOLT. They may be in a state of flux when it comes to the acquisition of the language of learning. I noticed in the context of my teaching these learners, that language proficiency does not always predict academic performance, in that many second language speakers often perform better than their first language peers and this led me to question whether factors other than language proficiency are at work. Many second language learners do not come from a reading culture at home. Learners obtain their first literacy in a second language. Reading strategies are also only taught until Grade 3 where it is assumed that learners have developed the ability to decode and are therefore ready to 'read to learn'. The question asked is whether learners' reading ability, defined as the ability

to read for meaning and the ability to understand what is read, is one of the other factors that may be at work when it comes to learners' academic performance

The aim of the study is to determine whether there is a significant relationship between English language proficiency, reading ability and academic performance in Grade 7 ESL learners in former model C schools. In addition to this, the aim of the study is also to determine which of these variables is most robustly correlated to academic performance amongst learners in submersion contexts.

1.4.3 Purpose of the study

The purpose of the study is to investigate the relationship between English language proficiency, reading ability and academic performance to see which of these is the most significantly related to learners' academic performance. The results can assist teachers in identifying where learners' problems lie and implement interventions to address those problems so as to improve learners' academic performance. Additionally, school policy makers may also introduce policies based on the findings of the study so as to assist learners who face the additional challenge of learning in a language that is not their mother tongue.

1.4.4 Research question

Thus, the main research question is:

Is English reading ability or English language ability more robustly correlated to academic performance in Grade 7 ESL learners in submersion context?

The present study is similar to that of Pretorius (2002) who investigated the relationship of reading ability, language proficiency and academic performance amongst first year medical students at the Medical University of South Africa (Medunsa). The study found that there is a strong connection between reading ability and academic performance and that reading ability is a more robust indicator of academic performance than language proficiency and lastly it was found that inference questions as opposed to literal and paraphrase questions distinguished the weak from the good readers.

However, Grade 7 learners in a former model C school context differ significantly from the learners in the above Medunsa context. It may be argued that those particular students by virtue of their enrolment in a tertiary institution to study medicine may already have a well-developed language and may have read widely. They have matriculated and therefore their language proficiency may be significantly developed. It is also not easy to determine the context in which they learned their L1 literacy. With regard to Grade 7 learners however, their language proficiency is still developing and may therefore be more significant with respect to their academic performance. This study aims to investigate whether the relationship of reading ability and language proficiency to academic performance is significant in that the results have implications for teaching strategies and policy. Currently there is shift in policy towards exposing learners to English from an earlier age. This is in order to facilitate the shift to English that takes place from Grade 4 onwards. Teaching strategies are therefore aimed at improving language and supporting language acquisition in the LOLT. However, if it is found that reading ability is more robustly connected to academic performance teachers need to address reading more aggressively. The language debate is fiercely contested in the South African context and strategies need to be implemented that can best support second language learners in submersion contexts.

In addition, teachers often dismiss learners who perform poorly as having a language backlog and often fail to consider aspects such as reading problems that may play a role in learners' academic performance. If reading ability is significantly related academic performance, then teaching strategies need to teach reading skills explicitly. It is easier for learners to learn when new information is related to an existing 'schema'. This refers to the way our brains organise and store concepts that we already know. Thus, teaching involves building on existing 'schema' or building on an existing foundation. Klinger et al (2008) indicate that learners are often asked to learn sounds or phonics in abstract ways. Zoo phonics is one example that teachers may use to help learners connect the sounds with existing knowledge. As Klinger et al (2008: 62) point out "Queenie Quail", 'Umber Umbrella Bird' and 'Nigel Night owl' can seem quite meaningless to children who have not been exposed to

these names or animals prior to starting school.' Therefore not only are the ESL learners being asked to learn new letter names and sounds, they also need to acquire new concepts and vocabulary. Thus, if teachers do not help them make these connections and allow them extra time to learn or implement strategies to assist them, it is clear that they will struggle. It can therefore be argued that often learners may gear the majority of their cognitive effort to decoding and may be able to 'bark at print', but may be unable to read for meaning or may lack the vocabulary necessary to comprehend what they read.

Thus, this study is concerned with whether language proficiency or reading ability plays the more significant role in determining academic performance amongst Grade 7 ESL learners in submersion contexts. Learners in this context obtain their initial literacy in a L2 and not in their L1. Very little investigation has been conducted amongst learners in this particular situation and very little investigation has been made into how these learners' reading ability has been affected or mitigated by their language proficiency.

It is also interesting to consider reading ability and language proficiency in the context of a former model C school. As outlined above this context can be termed a submersion context where learners have to 'sink or swim'. All literacy is obtained in a 'straight for English' approach together with their L1 peers. Learners are given no support in their mother tongue and therefore a situation of subtractive bilingualism prevails. Pretorius (2002:175) cites numerous studies including those of Hafiz and Tudor,(1989), Eiley, (1991) and Mbise, (1993) that clearly show that attention to reading improves reading ability and this in turn improves language ability. Thus, in the former model C school context, a study that reveals how reading and academic performance are correlated can assist teachers in implementing strategies that will assist learners in developing reading comprehension skills. This in turn would develop language proficiency. Often the teaching of reading is primarily devoted to the teaching of decoding and often the teaching of comprehension strategies in terms of inferencing or discourse structure are neglected.

The study aims to investigate the relationship between language proficiency, reading ability and academic performance in grade 7 English second language speakers in submersion contexts.

1.5 Research design

Traditionally, research can be divided into two distinct areas namely qualitative and quantitative research. It is suggested that quantitative research is “obtrusive and controlled, objective, generalizable, outcome orientated, and assumes the existence of ‘facts’ which are somehow external to and independent of the observer or researcher” (Nunan,1992:3). Qualitative research on the other hand assumes that all knowledge is relative, and that there is a subjective element to all knowledge and research (Nunan, 1992). Therefore it is research based on ‘descriptive data that does not make regular use of statistical procedures.’ (Mackay & Gass, 2005: 162).

A quantitative study can further be divided into two groups namely associative and experimental. In both these types researchers attempt to find a relationship between variables. In associational research the aim is to determine whether a relationship exists between variables and what the strength of the relationship is. This is usually done statistically by means of correlations. This gives researchers an idea of how closely two variables are related in a given population. Association research is not concerned with cause and effect but rather with co-occurrence (Mackay & Gass, 2005).

In association research the null hypothesis is often assumed where it is stated that there is no relationship between items being tested. It is the task of the research to indicate that there is a relationship between the two variables being investigated, thereby rejecting the null hypothesis (Mackay & Gass, 2005.)

In this study a quantitative, associational method was employed. Three variables were identified, namely reading ability, language proficiency and academic performance. Learners’ performance in various measures of language proficiency and reading ability were correlated with learners’ academic performance.

The following null hypothesis was assumed:

H0 = There will be no difference in the relationships between English language proficiency, reading ability and academic performance.

If the null hypothesis is rejected it would have significant implications for the teaching approaches of L2 English in former model C schools.

1.5.1 Reliability and validity

The quantitative method employed in this study involves the measurement of language proficiency and reading ability by means of tests. Bachman (1990) indicated that reliability and validity are extremely important when making judgments about language ability based on tests. A test is said to be reliable if it gives the same results when it is given on different occasions or when it is used by different people (Richards, Platt & Platt, 1992).

Validity on the other hand is defined as “the degree to which a test measures what it is supposed to measure, or can be used successfully for the purposes for which it is intended.” (Richards et al, 1992)

Reliability therefore can be regarded as consistency of measurement. A reliable test enables us to make comparisons on the basis of test results. Comparisons can be made with regard to the performance of learners (norm-referenced) as well as with regard to the attainment of outcomes (criterion-referenced) (Maree & Fraser: 2004) From the above we can conclude that if a test is intended to score learners from most proficient to least proficient that test would be reliable. The test would have to rank learners in the same order if it was performed on a different occasion or assessed by a different person.

This already poses a number of problems because learners are individuals and can perform differently on different occasions even if the circumstances are identical. Anxiety, individual backgrounds or circumstances, noise interference and many other variables could interfere with or affect an individual’s performance on a test. At the same time assessors differ and each bring their own perspectives, characteristics and circumstances to bear on their assessment of tests. However, it is evident from the above that efforts can be made to eliminate inconsistencies in test design in

those aspects that we can control. Our aim therefore should be to obtain scores on a particular occasion that are similar to those that would have been obtained by the same students with the same ability on a different occasion. (Hughes: 2003) Hughes states that it is possible to quantify the reliability of a test by means of a reliability coefficient. A test with a reliability coefficient of 0 would be completely unconnected with the scores of the same test administered on a different day, while a test with a coefficient of 1 would have 100% reliability. There are different statistical methods to determine reliability coefficients. These include the split half method, the Kuder-Richardson 20 and 21 methods, and the Cronbach's alpha methods. The standardised tests utilised in the study namely the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) and the *Neale Analysis of Reading Ability* (NARA III, Australian standardisation, 1999) used the Kuder-Richardson 20 and 21 methods to calculate their reliability coefficients.

In this study reading ability was assessed by means of *the Neale Analysis of Reading Ability* (NARA III, 1999). Please see Appendix 4 and 5 for a copy of the texts used by the instrument and the relevant comprehension questions and scoring sheet. The definition of reading is highly complex. 'Reading behaviour mirrors the processes of thinking and is the co-ordinated expression of human behaviour.' (Neale, 1999). Reading is also related to language proficiency. However, Pretorius (2002:175) notes that it must be kept in mind that language proficiency and reading, although clearly related, are 'conceptually and cognitively specific skills that develop in distinct ways and that rely on specific cognitive operations'.

Cain and Oakhill (2006:697) conclude that the NARA is an effective instrument used to identify those who display a disassociation between reading accuracy (decoding) and reading comprehension. This therefore should also be an effective instrument in identifying learners who have reading problems associated with decoding. By Grade 7 it may be assumed that learners have mastered the decoding aspects of reading but this is not always the case as many high schools complain about learners who are in high school but who still have reading decoding difficulties. Bowyer-Crane and Snowling (2005) further attest to the ability of the NARA when used to test learners' comprehension ability related to the ability to make inferences. Anderson (1999 in

Pretorius & Ribbens, 2005) indicates that reading speed is also strongly correlated with reading ability. Reading rate is measured in terms of words per minute and is closely related to the automaticity of word recognition skills. The NARA is therefore able to score reading accuracy (decoding), comprehension and the rate of reading. The NARA can therefore be regarded as a valid measure of reading ability. The Australian standardisation of the NARA was used for this test. In terms of criterion related validity, the *Neale Analysis of Reading Ability* shows significant correlations with other reading tests including the Holborn and Schonell reading tests (Neale, 1999). One concern about the NARA is the fact that there is little evidence to indicate if the NARA has been successfully used with reference to English second language speakers in Africa.

The *Neale Analysis of Reading Ability* (Third edition, Australian standardisation, 1999) editorial committee performed a standardisation study in Australia in 1997. A stratified sampling procedure was employed based on the socio-economic status of schools in Australia. The consistency reliability coefficients (KR – 21) for the 1999 revised edition (Form 2) were as follows, for tests related to learners in Year 7 of schooling:

Rate	0.95
Accuracy	0.96
Comprehension	0.89

Defining language proficiency has important implications for language testing. At present there are no current standardised tests for language proficiency in South Africa. There are tests that have been devised by the Human Sciences Research Council (HSRC) but many regard these as outdated. However, Manyike (2007:12) notes that the results of these tests nevertheless give a good indication of what is happening in South African schools and she used the tests successfully in her study. These tests do contain a reading and writing component and it is the aim of this study to extract the reading ability variable from the language ability. The instrument devised for the HSRC by Reinecke (1992) for intermediate level language

proficiency was still used as it is generally regarded as indicative of language proficiency and has been used with effect in the study of Manyike (2007).

The *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) aims to determine the proficiency level of English second Language testees within the range of Junior Secondary Language Proficiency Levels (Grades 7, 8 and 9 – senior phase). This is the operational definition of ‘intermediate’. Please see Appendix 3 for a copy of the test instrument.

The test comprises of 40 multiple choice questions. Testees have to select the correct answer from four choices for each question. The test is mitigated by reading ability in that learners have to read the test and read the questions in order to take the test. Additionally, at least 10 of the questions relate to making inferences with regard to what is read in the given passages. However, as was outlined earlier, language proficiency can be seen as a multi-componential ability that includes reading ability.

Reading ability can be seen as an integral part of overall language proficiency and thus the test can be regarded as a valid measure of language proficiency. The test also covered language skills such as correct idiomatic use, recognising the denotative meaning of words, selecting appropriate language for a situation and selecting the appropriate parts of speech.

The items for the test were accepted by a committee of subject experts after a specification table had been drawn up and a thorough study had been made of the suitability of the items used to test language proficiency. The reliability coefficient (Kuder – Richardson 20) for this test was 0.89 and therefore satisfactory.

A pilot study was conducted with the research questions in view. A pilot study is generally considered to be a small scale trial of the proposed study. It investigates the procedures, materials and methods of the study. A pilot study is important in that it seeks to test and revise the materials and methods to be used in the study. It is useful in identifying and ironing out any problems before the final study is carried out. Revisions and adjustments can be made (Mackey & Gass, 2005). The pilot study

was conducted the year before the study using learners from the same school and using the same method of sampling and data collection.

1.5.2. The participants

De Lange in *The Star* (January 18, 2011:6) reports that a survey by the South African Institute of Race Relations (SAIRR) shows that race is less important as a factor of scholastic achievement than the type of school a child attends. It was noted that learners attending former Model C schools did better than those attending full State funded schools where fees are not required. Marius Roodt (cited in De Lange, 2011:6) adds that former Model C schools are still better resourced and managed than other schools in spite of receiving less money from the government. Former Model C schools are often well- resourced due to the greater involvement of parents through governing bodies and parent-teacher associations. Thus, a well-resourced former Model C school situated in the South of Johannesburg in South Africa was selected. It is believed that by selecting a former Model C school, variables that may have an influence on academic performance such as the lack of resources, lack of qualified teachers and large teacher to pupil ratios may be eliminated.

The primary school in which the study was undertaken is a well-resourced former Model C school. It has learners who are mostly of average socio-economic status (SES). There is a good reading program in place and there is a well-resourced media centre with a dedicated teacher-librarian funded by the School Governing Body. Class readers and group readers are available to learners to take home. Class readers that are studied include readers that are carefully selected as relevant to the learners' background and interests. Two short novels are studied as class readers during the course of the year. These include *Whitney's Kiss* (2004) by Onne Vegter and *The Breadwinner* (2000) by Deborah Ellis.

Whitney's Kiss (Vegter, 2004) is a teen novel about a Grade 7 girl who has to make important decisions about sleeping with her boyfriend in high school who is HIV positive. She also loses her father to AIDS and has to deal with the associated rejections and stigma at school. This title is a popular choice with the learners as they can identify with the characters. It is short and fast paced and well-pitched to

the reading level of learners. *The Breadwinner* (Ellis, 2000) is set in Afghanistan and was selected particularly to suit the Muslim learners in the school who form a high percentage of the school's population. The book deals with an eleven year old girl who has to earn money for her family after her father is arrested under Taliban rule. The book challenges stereotypes and deals with issues involving sexism and prejudice towards woman. Group readers are also available to learners. These include titles by Anthony Horowitz, Meg Cabot and Dick King Smith amongst others. The learners are therefore exposed to a variety of relevant reading matter which is readily available.

Teachers are well qualified and the majority have a four year teaching degree. There is a teacher/learner ratio of 40:1 which may be high in comparison to the national average of 30:1 (SAIRR, 2010:42) but is reasonable in comparison to ratios that exist in less well-resourced schools which may be as high as 60:1 or 70:1.

The school under scrutiny has in excess of 1000 learners and is multicultural in composition. Approximately 40% of learners in the school are English home language learners. The majority of these are Coloured and Indian children. The other 60% comprises second language speakers, most of whom speak isiZulu, Sesotho, Sepedi, isiXhosa, Setswana, Tshivenda or Xitsonga. The other official languages are also represented in the school's population. In addition there are a few learners who speak Portuguese, Shona and Urdu as home languages.

English is the LOLT and second language learners are submersed in the English LOLT environment from Grade 1. All administrative and business communication in the school is conducted in English and therefore in many learners' L2. Learners' initial literacy instruction is in their L2 and by their Grade 7 year, English second language learners have been learning in English for 7 years with little, if no academic support for their L1.

The majority of teachers speak English but represent a variety of different home languages. The subjects chosen for this the study were Grade 7 learners in their first year of the senior phase and in their last year of primary school. Their ages ranged from 12-14 years. As they progress to high school they will increasingly need skills

in order to read for learning and information. They will have to be able to extract meaning from expository texts and will need to be able to 'read to learn' as they go to high school. Thus, it is for this reason that Grade 7 English second language learners formed the basis of this study. There were 158 learners in the group selected for study and 89 learners out of the 158 learners were English second language speakers. Therefore 56.3 % of learners in the study were English second language speakers.

1.5.3 Data collection procedures

A strategy of convenience sampling was employed in selecting participants from the above population for the study. There were four classes of Grade 7 learners with between 38 and 40 learners in each class. I teach English at home language level to all four of these classes. I employed rigorous quantitative methods so as to avoid any bias that I may have had. Any learner in the selected group had an equal probability of being chosen. English second language learners were approached and letters were sent home to the English second language learner sample within each class. Those that gave permission for the test were therefore used in the study. A total of 36 out of the 89 English second language speakers returned consent forms and thus participated in the study.

1.5.3.1 Academic Performance

Learners' academic performance is reflected on a report at the end of each term. Their summative assessment mark is based on continuous assessment throughout the term. Learners are assigned various tasks and are assessed by means of a variety of forms of assessment as well as a variety of assessment strategies. The learners' summative average term mark for all 10 learning areas was therefore considered as indicative of learners' overall academic performance. The average term mark is calculated by using the learner's academic summative average over 10 learning areas for the term. In the study the learners' fourth term mark for the 10 learning areas was used to rank learners by means of the 9 point Stanine interval scale.

The Stanine (STANDARD NINE) scale is a means of scaling scores on a nine point scale with a mean of 5 and a standard deviation of 2. It is calculated by ranking scores from highest to lowest and then giving the lowest 4% a score of 1, the next 7% a stanine of 2 etc. in accordance with the following table:

Result Ranking	4%	7%	12%	17%	20%	17%	12%	7%	4%
Stanine	1	2	3	4	5	6	7	8	9

Table 1.1 Stanine Ranking

Additionally, the 36 learners in the study were divided into three groups with respect to academic performance as follows:

Stanine 1 – 3 Low ($n = 7$)

Stanine 4 – 5 Average ($n = 14$)

Stanine 6 – 9 High ($n = 15$)

This enabled the average performance of each group achieved in each test to be compared by means of a bar graph.

Parents provided permission for the learners' academic results to be used for the purpose of the study (see Appendix 2.)

1.5.3.2 English language proficiency

The *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) was administered to all learners whose parents granted permission for them to participate in the study as outlined above. The test was administered outside of teaching time as per the requirements of the Gauteng Education Department. Learners were given 40 minutes to complete the test. The results of this test were individually correlated with their academic performance.

1.5.3.4 English reading ability

The *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) was administered to all learners whose parents granted permission for them to participate in the study. The test was administered in the afternoons with each learner being allocated 20 minute appointments. The results of the NARA were individually correlated with academic performance of the learner.

1.5.4 Data analysis

A one-way Analysis of Variance (ANOVA) was conducted to determine if the three groups' performance on each test was statistically different. In addition to this, the null hypothesis was tested by means of the Levene's test. The correlation was examined to determine whether there was any significant relationship between reading ability, language proficiency and academic performance. These correlations were calculated by means of the Statistical Package for the Social Sciences (SPSS) 22 statistical software.

1.5.5 Ethical considerations in the research context

When dealing with human subjects certain ethical considerations need to be made. The Nuremberg code (1949) ensured that informed consent became a basic principle of research involving human subjects. Informed consent implies that human subjects should be provided with the opportunity to choose what shall or shall not happen to them. Gass and Mackay (2005: 27) report that the following conditions need to be fulfilled with respect to informed consent:

- a. Sufficient information must be supplied (there must be full disclosure about the experiment by the researcher).
- b. Comprehension on the part of the subject. (When it comes to using minor children the researcher needs to explain the research in language that is meaningful to the child.
- c. In addition the child's parents need to be informed about the nature of the research.)

- d. Voluntary participation in which the subject is free from undue pressure or concern.

Gass and Mackay (2005) indicate that the research must not negatively impact the second language learning process or pose any more than a minimal risk to the physical and psychological well-being of the child. Confidentiality is also essential and it is imperative for the researcher to make it clear to participants that all information remains anonymous and confidential at all times.

Before subjects were approached written permission for the study from the Gauteng Department of Education was obtained. Studies may only be conducted in a Gauteng provincial school during the second and third terms and all studies must be conducted outside of teaching time. These parameters were adhered to in the main study as well as in the pilot study. See Appendix 1 for the approval letter from the Gauteng Department of Education (GDE).

Written informed consent was obtained from the parents of learners by means of a written informed consent document. See Appendix 2 for an example of the consent document sent home to learners and ethical clearance was obtained by UNISA to complete this study.

1.6 Rationale of the study

As noted at the outset, matriculation results in South Africa remain unacceptably low and the blame for the low academic performance is laid firmly at the door of poor English language proficiency. Literacy levels in South African schools are also significantly lower in comparison with the rest of the world. Carter (2008) reports on the findings of Makuwa and Marimba (2006 in Carter, 2008:22) after a round of Southern and East African Consortium for Monitoring Educational Quality (SACMEQ) evaluations of Grade 6 learners in 14 countries undertaken in 2001. Of the 14 countries that were surveyed, South Africa ranked eighth with Seychelles, Mauritius, Kenya, Tanzania, Botswana and Swaziland and Mozambique performing better than South Africa. Based on this, Carter (2008:25) states that we can

conclude that “there is something drastically wrong with the quality of education in South Africa and the long term effects of competency are very worrying.”

In 2006 South Africa participated in the 2006 international Progress in Reading Literacy Study (PIRLS). Forty countries and 45 educational systems participated in the PIRLS survey and South Africa was ranked last out of all the countries and educational systems surveyed. It cannot be argued that South Africa’s poor ranking can be related to socio-economic concerns as South Africa was ranked as the tenth poorest and was average in terms of Gross Domestic Product (GDP) and public expenditure on education. South Africa was exceptional in that it had the lowest life expectancy at birth of 46 years and the highest infant mortality rate. It also had the highest learner: teacher ratio (Howie, Venter, Van Staden, Zimmerman, Long, du Toit, Scherman & Archer, 2006: 3).

International benchmarks were used to evaluate learners’ performance and it was found that the majority of learners including more than half of the English and Afrikaans speaking learners and 80% of African language speaking learners did not even achieve the lowest international benchmark. This indicates that “substantial intervention is needed in order to improve South African learners’ reading literacy”. (Howie et al, 2006:25) If the exact nature of the literacy problems can be ascertained and if language proficiency problems can be distinguished, appropriate intervention strategies can be implemented.

In 2008 the GDE conducted an assessment of Grade 3 and Grade 6 Literacy/Language and Numeracy/Mathematics in all public primary schools. Grade 3 learners in the province achieved an average literacy score of 38% while Grade 6 learners achieved an average score of 53%. (GDE, 2009:1) The Johannesburg Central District which covers a large percentage of schools in Soweto achieved averages of 38% and 53% for Grades 3 and 6 respectively. The school in which the pilot study for this research paper was conducted (a former Model C middle class suburban school) achieved averages of 66% and 65% for Grades 3 and 6 respectively, performing significantly better than the district and province as a whole (GDE, 2009:1). It was noted, however, that schools that achieved between 50% and

68% achieved the required competency but that more effort was needed for learners to excel in these learning areas. The report (GDE, 2009:6) noted that “educators should encourage learners to read widely and be competent in relating to what they are reading.”

Pretorius and Ribbens (2005:139) note that “neither in the past nor in the present have there been national assessment procedures for monitoring reading, and determining whether learners are reading at their appropriate maturational levels. Consequently it is difficult to determine officially, to what extent learners have reading problems and whether the education system is delivering on its mandate to produce literate learners.” In view of this it is difficult for teachers to ascertain whether learners are sufficiently equipped to “read to learn” and consequently achieve academically.

In South Africa, there is the challenging situation where the majority of learners learn in a language that is not their mother tongue. In the context of the school used in this study, second language speakers learn their first literacy in English as a second language and do not learn literacy in their first language in a formal education context at all. Furthermore, the school is situated in an urban context where all 11 of the official languages are represented, including various other languages such as Shona, Portuguese, Urdu and French. Therefore, it is difficult to ascertain whether learners who are performing poorly academically are doing so because of their limited language ability or because of reading ability.

I became interested in investigating the relationship between reading, language proficiency and academic performance in a submersion context where learners obtain their first literacy in a second language because I am a teacher in this context and would like to implement interventions that can improve learners’ academic performance. There have been similar studies (Pretorius and Ribbens, 2005) that have investigated these variables but I would like to replicate the studies in my own teaching context to see if similar results can be obtained. Further studies that test the hypothesis which is, reading ability and reading strategies that are more robustly connected to academic performance may further highlight the urgent need for

schools to place more emphasis on the teaching of reading and comprehension strategies. The study may also point to the effect that learning a first literacy in a second language in a submersion context has on the academic performance of learners. It may further highlight the need for emphasis to be placed on providing schools with books and libraries. At present there is no National Policy with regard to school libraries and there is no formal post allocation for a school teacher-librarian. Kgosana in an article appearing on March 29, 2010 in *IOL News* reports that according to the Department of Basic Education 78 000 schools in South Africa do not have libraries. Statistics released by the department indicate that about 19 000 primary schools and 4000 high schools in South Africa do not have libraries or computer centres.

It is true that “what a school thinks about its library is a measure of what it feels about its education” (Howe, 1967: 28). In fact, we could go further and say that what a country thinks about its libraries is a measure of what it feels about its education. Therefore, it is imperative therefore, that emphasis is placed on developing a culture of reading and that the correlation between reading skills and academic performance is well documented. It is also important to pay attention to the aspects of reading difficulties and determine in which aspects learners are having problems in order to improve the quality of teaching and to train teachers accordingly. It is also important then, that the provision of books and information to all schools is given priority.

On the other hand, if it is language proficiency that is more robustly connected to the academic performance of Grade 7 learners, it would be prudent for teachers to implement strategies that contribute specifically to improving language ability. This study therefore aims to further investigate the relationship between language proficiency, reading difficulties and academic performance by second language learners in the South African context. The answers to these questions would assist teachers in formulating teaching strategies that would support and assist learners at a much earlier stage.

1.7 Definition of terms

I will now outline the terms used in the study and provide definitions as adopted in this study as follows:

Submersion – As used in this study, the term submersion refers to the ‘sink or swim’ approach where learners are submerged in a LOLT that is not their L1. They are only exposed to the L2 and there is no overt support for their L1. All instruction is given in the L2 and their first literacy is learned in the L2. Thus, a culture of subtractive bilingualism is adopted. Submersion is different from the term immersion which is a term that is used to refer to programmes that were first used in Canada in the 1960s where French was used as the medium of instruction for students whose home language was English. At least 50% of instruction is in the learners’ L1 while the other 50% is in the L2. Immersion programmes are characterised by overt support for the L1. Teachers are bilingual. The classroom culture is that of the L1 community and a culture of additive bilingualism is adopted. (Cummins, 2000)

Language proficiency – Canale and Swain (1980 in Brown, 2000:246) developed a definition of language proficiency or communicative competence that involved four different components namely:

- Grammatical competence which includes knowledge associated with the linguistic code of the language and would involve knowledge of the grammar of the language.
- Discourse competence which is the ability to connect sentences in stretches of discourse and to form a meaningful whole out of a series of utterances. This would include discourse as both spoken conversation as well as written texts.
- Sociolinguistic competence which refers to the knowledge of the sociocultural rules of language and of discourse. This requires knowledge of the social context and involves the ability to make judgements on the appropriateness of a particular utterance.
- Strategic competence involves both verbal and nonverbal communication strategies that are utilised to compensate for breakdowns in communication

as result of imperfect knowledge of rules or other limiting factors. It may also refer to competence in being able to enhance communication to best convey the message.

Subsequent research further develops the view that language proficiency is multicomponential and consists of a number of specific abilities as well as a general ability or set of general strategies or procedures. Widdowson (1983, in Bachman, 1991: 682) defines language ability as the capacity to use the knowledge of a language in conjunction with the features of the language, and use context to create and interpret meaning. Bachman and Palmer (1990 in Bachman, 1991:682) rely on this definition in their model of language ability. Their model suggests that language ability includes two types of components namely knowledge of language which would be unique to language use and metacognitive strategies which would be general to all mental activity. Defining language proficiency has important implications for testing. Often what is tested cannot be clearly observed as is the case with listening or reading comprehension for example, which is often mediated through speaking or writing.

In a more skills orientated approach to a definition of language the RNCS (Department of Education, 2005) views language proficiency as composed of the following skills or learning outcomes:

1. Listening
2. Speaking
3. Reading and Viewing
4. Writing
5. Thinking and reasoning
6. Language structure and use

Here reading is seen as an integral part of language proficiency. However, they cannot be seen as one and the same thing. First language speakers have varying levels of reading competence and reading comprehension and may also experience reading difficulties. Language proficiency in this study is viewed as the learner's

ability to understand and communicate in English in an academic environment. It is viewed as synonymous with CALP. Reading is an integral part of this ability but they are not one and the same thing.

Reading Ability – Reading involves both being able to decode the print text as well as being able to comprehend or make sense of what is being read. It is generally believed that the ultimate goal of reading is to understand the meaning of the text. As is the case of any language activity, deriving meaning is the ultimate goal of any communicative act. Therefore the aim of reading is to arrive at meaning or understanding of the text. Cutting and Scarborough (2006:278) describe Gough and Turnner's (1986 in Gough, 2005) influential simple view of reading, which is that reading is seen as the product of decoding ability and listening comprehension. Decoding ability refers to the ability to decode the words of the text. It refers to understanding the phonetics, orthography and lexical elements of the text and is often termed bottom up processing. Listening comprehension on the other hand refers to the strategic competence required to analyse the syntactic and semantic relationship between the words to understand the text. This is referred to as top down processing. If there is any problem with the learner's decoding skills then top down processing skills cannot be implemented and meaning will not be ascertained. If decoding is fine but there is no listening comprehension or problems with top down processing meaning will also not be achieved. Thus, as Cutting and Scarborough (2006:278) indicate both of these are necessary but neither is sufficient on its own.

Cutting and Scarborough (2006) indicate that some children can be excellent decoders but are still weak comprehenders. Cutting and Scarborough (2006) give account of numerous studies that show that a very small percentage of school-age children who are weak comprehenders, actually show problems with regard to phonological processing deficits. Therefore their problems can be ascribed to problems with regard to oral language processing or listening comprehension deficits. These would include problems related to oral proficiency, vocabulary and syntactic relationships.

Cutting and Scarborough (2006) conclude that the simple view of reading is sufficient in that there seem to be no other factors except for reading speed that may influence reading aside from decoding and listening comprehension. However, Beck and Carpenter (1986:1100) indicate that both cognitive and linguistic processes are involved in reading. For example, readers not only relate information within a sentence but also within a text. They make references to items mentioned previously in a text and thus have to have an internal text memory skill. Also they have certain knowledge of the world which can be termed a 'schema' in which to slot what they read. Thus, a certain amount of the reader's own background knowledge and sociocultural bias also affects reading comprehension. Readers also need to have an awareness of text structure and how it will be organised.

It is clear from the above that reading ability involves the interaction of a number of skills. Decoding is an important aspect which involves the ability to decipher the marks on the paper and refers to phonetics, orthography and word recognition. These skills are referred to as bottom-up processing skills. Comprehension is also essential and involves the interaction of the reader with the text. It refers to understanding the words and would stem from the oral language proficiency of the reader. It would also involve the background knowledge the reader brings to the text. These skills are referred to top-down processing skills. Alone neither of these skills are sufficient for reading ability. In this study reading ability refers to the ability to decode and to comprehend text.

1.8 The structure of the rest of the study

Chapter Two is the literature review. A review of relevant literature will be conducted to synthesise similar studies with regard to reading ability and language proficiency of ESL learners in submersion contexts. Published studies with reference to bilingualism, multilingualism and the effect that learning in a second language in a submersion context has on the academic performance of second language learners will receive particular attention. Studies that investigate the connection between language proficiency and its connection with the development of reading skills will also be investigated.

Chapter Three is the methodology chapter. Here the quantitative methods used for the study will be discussed in detail. This will include descriptions of the instruments used, the selection of participants, the methodology of the study and ethical considerations.

Chapter Four will comprise the findings. Here, the results of the tests will be analysed and discussed in terms of their meaning and implications.

Chapter Five will conclude the study. In this chapter, the study and its findings will be summarised and recommendations for teaching strategies with respect to supporting the enhancement of language proficiency amongst ESL learners in submersion contexts will be outlined. The possible impact of the study with respect to policy formulation will also be indicated.

Chapter Two

LITERATURE REVIEW

2.1 Introduction

Chapter One introduced the study and gave an overview of the rationale behind the study and also gave an account of the context that South African ESL Grade 7 learners in a former Model schools learn in. In this chapter, research studies that bear relevance to this particular study are reviewed. Studies that relate to English reading and English language proficiency in submersion contexts are considered as well as those that look at the relationship of academic performance to English reading ability and English language proficiency of English Second Language learners. This research project seeks to investigate the relationship that English language proficiency and English reading ability have in relation to the academic performance of English Second Language Students in submersion contexts. This has implications for the strategies that teachers can focus on in their classrooms in order to best support and assist these learners. This also has implications with respect to policy formulation and how English is taught as a subject in schools. Thus, in Section 2.2, the Language-in-Education Policy (LiEP) is considered and how it informs teaching in schools. In Section 2.3, the role that English language proficiency plays with respect to academic achievement is considered, and what is meant by English language proficiency, and the theories relating to language learning and language acquisition are examined. Section 2.4 looks at English reading ability and the acquisition of literacy in a second language. It also considers the role that English reading ability plays in the academic achievement of ESL learners.

2.2 Literacy levels and the academic achievement of primary school learners in South Africa

As noted in Chapter One, literacy levels in South African schools are significantly low in comparison with the rest of the world. For example it was found that in the SACMEQ evaluations conducted in 2001, South African Grade 6 learners ranked

eighth out of the 14 countries surveyed (Makuwa & Marimba, 2006 in Carter, 2008:22). The learners were only tested for numeracy and literacy levels and the results were graded into eight levels as follows:

Level 1 – Pre-reading

Level 2 – Emergent reading

Level 3 – Basic reading

Level 4 – Reading for meaning

Level 5 – Interpretative reading

Level 6 – Inferential reading

Level 7-- Analytical reading

Level 8 – Critical reading (Makuwa & Marimba, 2006 in Carter, 2008: 34)

The results of the aforementioned study showed that 66.1% of the Grade 6 learners assessed scored less than level 5 on the assessments for literacy.

Furthermore, as was also noted in Chapter One, South Africa was also ranked last in the PIRLS survey. Forty countries and 45 educational systems participated in the PIRLS survey of 2006, and three aspects of literacy were assessed namely:

- Processes of comprehension
- Purposes for reading
- Reading behaviours and attitudes

Grade 4 and 5 learners were assessed as this is the period where the transition is made from 'learning to read' to "reading to learn' (Howie et al, 2006). Questions in the PIRLS survey focused on the following comprehension processes:

The learners' ability to:

- Focus on and retrieve explicitly stated information

- Make straightforward inferences
- Interpret and integrate ideas and information
- Evaluate and examine content, language and textual elements (Howie et al, 2006:25)

It is therefore evident that South African learners are struggling with reading and the ability to understand what they are reading and therefore interventions are necessary to assist these learners.

The Stats SA household survey data indicates that just over 40% of youths end up passing matric. While there has been a steady increase in the Grade 2 to matric learner throughput rate over the last few years, from 28.0% in 2009, 34.2% in 2010, 37.7% in 2011, 38.2% in 2012 and 40.4% in 2013, this school completion rate is still quite low in comparison to other developing countries. Turkey for example has a completion rate of 53% and Brazil has one of 67%. (Department of Basic Education, 2014:1). The Department of Basic Education (DBE) indicates that although factors such as financial constraints, gang involvement and family commitment play a role in dropout rate, the major cause is weak learning foundations. The Department therefore indicates that steps that address literacy and numeracy especially with respect to reading acquisition need to be taken.

In 2010 the South African education minister Angie Motshekga announced that there would be a plan for schools called the “Action Plan 2014” which would be part of a larger vision called “Schooling 2025”. The Action Plan lists 13 output goals to improve the quality of education and to improve performance of learners. Goal four aims to increase the number of Grade 12 learners who are eligible to complete a Bachelor’s programme at university (Department of Basic Education, 2011). At present 1 in every 8 South African youths gets a university pass. The Department of Basic Education (DBE) aims to improve that rate to 1 in 5 by 2014 and to 1 in 3 by 2025 (DBE, 2011).

Goal two aims to increase the number of Grade 6 learners who by the end of the year have mastered the minimum competencies in English and Mathematics for

Grade 6. The Action Plan indicates that one of the greatest challenges experienced in the intermediate phase (Grades 4-6) is the switch for close to 70% of learners from learning in one of the nine African languages to English in Grade 4.

The Annual National Assessments (ANA) were implemented in 2008 in order to monitor learner achievement in languages and Mathematics. The ANA represent a vital measure undertaken to address academic achievement at primary schools (Department of Basic Education, 2014).

The language tests cover the learner's home language and the learners' First Additional Language, which in the majority of South African learners is English. ANA would enable schools to monitor themselves and improve the quality of education being delivered and would also enable interventions to be implemented in schools whose ANA results would indicate that they would need interventions the most.

At present, the ANA present a dire picture. The Annual National Assessment Diagnostic Report of 2012 (DBE, 2012:5) indicates that many learners cannot read with comprehension, they are unable to produce meaningful written outputs and they lack the ability to make inferences from the given information in a text. Furthermore, learners' knowledge of grammar is limited and learners struggle to spell frequently used words correctly. The report also indicated that Grade 6 learners in English Home Language demonstrated a lack of or inadequate understanding in Home Language. It must be borne in mind that where English is the LOLT in schools English is referred to as the "Home Language" even though most learners may be ESL learners. The report indicated that "most of the learners in Grade 6 displayed acute lack of knowledge of the basic elements of language structure" (DBE, 2012:26). The report also suggests that a major factor observed in the performance of learners in both Language and Mathematics is the inability to read with understanding. The learners are unable to grasp the words and meanings that they carry in given texts and also cannot construct their own meaningful sentences. The Diagnostic report also indicated that learners who took English as a FAL indicated similar problems in that they had serious limitations in so far as understanding and using basic language structures. Thus, the DBE highlights two salient aspects lying

at the root of learners' challenges in primary schools. Firstly, learners are unable to read with understanding and they are unable to use language structures. This highlights the two major aspects of this study namely English reading ability and English language proficiency. Being able to analyse which of these aspects is most robustly correlated to academic performance will assist teachers in intervening most appropriately and thus support learners in an effective manner.

2.2.1 Language-in-Education Policy (LIEP)

The current LIEP needs to be seen against the historical backdrop of language and education in South Africa prior to the end of Apartheid rule in 1994. In 1953 the Bantu Education Act aimed to enhance the power and domination of Afrikaans as a language. It also used the many languages prevalent in South Africa to further segregate and divide. According to the Bantu Education Act of 1953 Black learners would receive mother tongue instruction until Grade 8. Furthermore the aim was to reduce the influence of English in Black schools and increase the dominance of Afrikaans. Black learners would receive equal education in English and Afrikaans. Thus, Black children would be instructed in three languages, English, Afrikaans and their mother tongue (Kamwangamulu, 1997). On 16 June 1976 the Soweto Uprisings occurred as a result of the rejection of the Bantu Education Act and the rejection of the domination of Afrikaans. This rejection of the Bantu Education Act also led to the rejection of mother-tongue education and the view that mother tongue education was actually a stumbling block to liberation. Mother tongue education was actually seen as preventing Black learners from accessing tertiary education and was viewed as a hindrance to further knowledge and further socio-economic empowerment. Thus, English came to be viewed as a means to upward mobility, further education and to liberation. English became firmly entrenched as the language of instruction in most Black schools prior to 1994. (Kamwangamulu, 1997)

With the demise of Apartheid the new South African Constitution (RSA, 1996a) acknowledged 11 official languages namely English, Afrikaans, isiZulu, isiXhosa, Tshivenda, Xitsonga, Sepedi, Setswana, Sesotho, SiSwati and isiNdebele. As a means of redress and to acknowledge the status of all the above languages, Section

29(2) of the Bill Rights which is part of the South African Constitution unequivocally outlines the right of all to be educated in the official language of choice in public institutions. Kamwangamulu (1997:240) cites the 1953 UNESCO report which recommends that learners be educated in their mother tongue and that this education be extended for as long as possible. Further case studies such as those of Akkinaso (1999:263) cited by Kamwangamulu (1997:240) show that there is a positive correlation between mother tongue education and academic achievement. In a report on the status of the LOLT in South African Schools, the Department of Basic Education (DBE, 2010:5) cites the World Bank report of 2005 which indicates that mother tongue education gives learners better access, decreases repetition and drop-out rates and has socio-cultural benefits. Therefore in light of studies like these provision was made in the Constitution for mother tongue education.

The Bill of Rights however indicates that while it is the right of every learner to be educated in their mother tongue this is tempered by the ability of the State to practically implement this instruction. Kamwangamulu (1997) explains the difficulties associated with the implementation of mother tongue instruction. Firstly, there are areas which are linguistically diverse. Speakers of many different languages inhabit one particular area. In areas, like Soweto which is an urban metropolis, speakers of all of the 11 languages may co-exist in one school community. In this instance it would be difficult to determine a mother tongue in such an area. Furthermore, students may also not have one particular mother tongue. They may speak more than one language at home. They may speak one language with their mother, another with their father, another with a caregiver and a further language with friends and peers in the community. In an area like Kwa-Zulu Natal there may be a different scenario. The implementation of mother-tongue education may be more practicable as isiZulu is predominantly spoken in that province and therefore it may be more readily identified as the mother tongue of a particular community.

Banda (2009) indicates that language policy in Africa is influenced by Western notions of multiple monolingualisms. In this view, the 11 official languages of South Africa are promoted as distinctive languages in homogenous communities. But as indicated above, in Africa this is not the case because in Africa languages are

closely related and are often mutually comprehensible. In addition to this, in Africa as opposed to Europe, languages cross geographical borders. Banda (2006:5) further notes that in Africa bi-/multilingualism is “the norm” and that second languages are acquired naturalistically. He argues that policy formulation that is based on models which promote a single language as a language of instruction is not in keeping with the linguistic situation in Africa.

The LiEP (cited in DBE, 2010:7) while theoretically encouraging multilingualism makes provision for the LOLT of a particular school to be chosen by the School Governing Bodies (SGBs). It is therefore up to the parents to determine the LOLT of a particular school. Both the National Curriculum Statement (NCS) and the LiEP encourage learners to be taught in their home language during the first few years of schooling. After Grade 3, the shift can be made to be taught through the medium of English. Here, in contrast with Banda’s notion of multi bilingualism the LiEP sees additive bilingualism simplistically where a language, which more often than not is English, is added to a monolingual’s repertoire and not to the repertoire of a learner who is already bi-/multilingual.

The LiEP encourages additive bilingualism but ultimately leaves the choice of the LOLT in the hands of parents. As was indicated earlier, English is seen in the minds of many parents as the key to socio-economic freedom and as an “open sesame” to many doors of opportunity (Kamwangamulu, 2003: 68). In 2007 approximately 80% of Foundation phase (Grade 1-3) learners were learning in their home language (DBE, 2010:17) while in the Intermediate phase (Grade 4-6) 27% of learners were learning in their home language (DBE, 2010:19). In the 2010 report on the status of the LOLT in schools, the DBE indicates that significant improvements with regard to African learners learning in their mother tongue during the Foundation phase have been made since 1998. However, in 2007 close to 25% of African learners in the Foundation phase were not learning in their mother tongue (DBE, 2010:18). The National Curriculum Statement also states that from Grade 1 learners had to be offered a language at an additional language level. However, in practice this did not happen which meant that many learners who had to make the transition from home language as the LOLT to English as the LOLT in Grade 4 did not have any prior

exposure to it. In fact in 2009 less than 1% of Grade 1 learners had English as an additional subject despite the fact that the majority of learners switched to English as the LOLT from Grade 4 onwards.

The South African government attributes poor matriculation results to poor language skills (Govender, 2010). A 2010 survey on the status of the LOLT in schools showed that in 2007 21.8% of learners in Grade 1 were being instructed in English. However, 81.8% of learners were being taught in English in Grade 12 and overall 65% of learners in South were being instructed in English (DBE, 2010:16). Govender (2010:1) reports the then Minister of Education, Angie Motshegka as saying that learners should be introduced to English earlier because in terms of cognitive development learners they are more receptive to language acquisition at that stage. Thus, the South African Education system has received an overhaul and the Curriculum and Assessment Policy Statement (CAPS) was formulated for learners in the Foundation phase to be exposed to English as a fourth subject from Grade 1 (DBE, 2012c). CAPS was introduced in Grades R-3 in 2012, Grades 4-6 in 2013 and Grades 7-9 in 2014. CAPS provides for a Home language (HL) and a First Additional Language (FAL) as subjects from Grade 1. The assumption is made that for most learners who have a home language other than English the First Additional Language would be English.

However, in the context of many English LOLT schools, ESL learners are exposed to English in a submersion context. These learners have varying degrees of exposure to English prior to attending school. They may have been exposed to English at home or at a pre-school or crèche, however some may have little or no exposure to English before they arrive in the Grade 1 classroom. These schools then often offer Afrikaans as the FAL and this compounds the challenges that ESL learners face in the Foundation phase as they have to contend with a language at FAL level that they have little or no exposure to. The reason for offering Afrikaans as a FAL may be due to the fact that the majority of learners in the school may be English or Afrikaans home language speakers. It may also be due to the inertia of the SGBs who fail to make an effort to change the status quo of schools that have historically offered Afrikaans as the FAL. In schools that service multicultural communities especially in

linguistically diverse urban areas, this historically motivated decision may be the easiest as there may not be an easily identifiable alternative African language as learners represent diverse linguistic communities. It may also be due to the fact that the High Schools in the community only offer Afrikaans as the FAL. As yet there is no provision for a Second Additional Language (SAL) and thus learners have no opportunity to take up an African language as a subject.

2.3 English language proficiency and academic performance

2.3.1 What exactly is language proficiency?

Early theories with regard to language acquisition influenced ideas of what constituted language competence or language proficiency. Noam Chomsky (cited in Brown, 2000:24, 25) suggested that children are born with an innate ability that facilitates language learning. This ability is termed the Language Acquisition Device (LAD). This ability enables children to decipher the abstract rules that underlie language. MacNeill (1966 in Brown, 2000:24) states that that the innate ability or LAD consists of the following abilities:

- The ability to distinguish speech sounds from other sounds in the environment.
- The ability to organize linguistic data into various classes that can later be refined.
- Knowledge that only a certain kind of linguistic system is possible and that other kinds are not, and;
- The ability to engage in constant evaluation of the developing linguistic systems so as to construct the simplest possible system out of the available linguistic input.

From the above, we see that LAD is referred to as an in-born mechanism which would enable children to process the language spoken in their environment. This process involves making a series of hypotheses and then testing these hypotheses

which will lead to rule formation. By means of this analysis the children are able to produce grammatical sentences and this includes sentences that they have never heard before.

However, researchers went on to expand the notion of LAD to include a system of universal linguistic rules or Universal Grammar and thus language competence came to be viewed as the native speaker's internalised grammar. This led to language competence or ability being viewed in terms of a single or unitary competence involving linguistic grammar. Research in the field of sociolinguistics, pragmatics and discourse analysis has indicated that the native speaker has other rule systems which influence language behaviour (Wesche, 1983).

Hymes (1967, in Brown, 2000:246) noted that Chomsky's definition of language competence was limited. He stated that Chomsky's LAD did not adequately account for the social and functional rules of language. Hymes therefore coined the term communicative competence which refers to the aspects of competence that enable us to interpret and convey messages within a specific context. Hymes later distinguished between linguistic competence and communicative competence. It became clear that language competence involves more than just grammar competence at sentence level. Language ability involves other rule systems such as the speaker's intention, the context of the utterance and the relationship of the participants. Thus, it became clear that two different types of knowledge were necessary. There is knowledge about language forms, as well as knowledge about how to put forms together and create discourse and thus use language communicatively and interactively.

As outlined in Chapter One, Canale and Swain (1980 in Brown, 2000:246) distinguish between four key competences that make up the construct of language proficiency. These include grammatical competence, discourse competence, sociolinguistic competence and strategic competence. Grammatical competence involves the knowledge of "lexical items of rules of morphology, syntax, sentence-grammar semantics, and phonology" (Canale & Swain, 1980:29 in Brown, 2000:247). Dell Hymes (1967 in Brown, 2000) referred to this competence as

linguistic competence which can be described as knowledge about the language itself, and it encompasses metalinguistic knowledge and knowledge about the actual language code. Discourse competence builds onto grammatical competence and is clearly linked to it. This competence involves being able to connect sentences into discourse and construct a meaningful whole out of a series of utterances. It is important to note that this includes both spoken language as well as written texts. It can range from informal conversations to complex academic texts. Sociolinguistic competence refers to the ability to understand the social context in which language is used. This involves knowledge of register, style and jargon for example. Lastly, strategic competence refers to strategies that a speaker can employ, that may compensate for a breakdown in communication. These include the ability to use strategies such as paraphrasing, repetition, avoidances and guessing (Brown, 2000:247).

James Cummins (1979, in Brown, 2000:246) then distinguished between Cognitive Academic Language Proficiency (CALP) and Basic Interpersonal Communication Skills (BICS). CALP refers to that aspect of proficiency which includes the features of language which do not rely on an interpersonal context. This ability also refers to the use of language in the classroom and is more concerned with form (Brown: 2000.) Thus, CALP would take place in a context reduced environment. BICS refers to the communicative ability learners possess that enables them to communicate in context. Authentic real-life communication is context embedded and is dependent on the context it is in.

The four different aspects of language or communicative competence outlined by Canale and Swain can be divided into two basic sub categories. Grammatical and discourse competence refer to the form aspect of language, while the other two namely sociolinguistic and strategic competence refer to the functional or communicative aspect of language.

The definition of strategic communication has been modified over the years to include any strategy that enhances communication or achieves meaning. Thus, strategic communication could refer to the persuasive aspect of advertising, it could

refer to specific words chosen to get one's point across, it may also include choosing words carefully so as not to offend someone. Bachman (1990) gives strategic competence an executive function in his model of communicative ability.

Bachman (1996:67) states that language ability is composed of two parts; namely "language knowledge and strategic competence." Language knowledge is said to include organizational knowledge and pragmatic knowledge. Organizational knowledge refers to the ability to control the formal aspects of language which would include grammatical ability which is necessary to form sentences. This ability would then include textual knowledge - the knowledge of how to connect and comprehend sentences in the formation of either oral or spoken text.

Pragmatic knowledge includes functional knowledge which Bachman (1990) terms illocutionary competence, this helps us to be able to understand the connection between the utterance or text of the user and what the user actually means. For example the following utterance made by a father to his daughter who is standing in front of the television, "Was your father a glass maker?" The child interprets this statement as a request to move out of the way of the father's view of the television, even though at sentence level this has a completely different proposition. Pragmatic knowledge therefore includes knowledge of the world, of the setting and the fact that language can have imaginative or symbolic functions. It also includes sociolinguistic knowledge which refers to the ability to formulate or interpret language that is appropriate to a particular setting. We often change our style or register in accordance with the context we find ourselves in.

Strategic competence in Bachman's model refers to the metacognitive strategies employed in language use. Metacognitive strategies refer to the "executive" function strategies involved in learning (Brown, 2000:124). These include planning for learning, monitoring learning and evaluating learning. With respect to language learning these would include planning and rehearsing linguistic concepts, monitoring and correcting one's own speech and deciding on which aspects of language input to attend to. Bachman (1990:685) identifies three aspects of metacognitive strategies. These are:

- Assessment – Taking stock of what you have to do.
- Goal setting – Deciding what you are going to do
- Planning – Deciding on how to use what you have

However, Bachman does note that the use of language knowledge and metacognitive strategies exist interactively and cannot be isolated into linear or discrete entities. They interact with one another at the same time and there is no order in which they operate. It is also important not to forget that language use takes place within a context and used to convey meaning within certain situations.

Thus, language proficiency has to be seen as more than the sum of the four discreet skills namely: reading, writing, speaking and listening. As Wesche (1983:42) points out the “whole of language is greater than the sum of the elements and the systems that compose it.” Therefore communicative competence refers to an integrated system of knowledge which involves the interaction of many different skills.

2.3.2 Language acquisition and language learning

Cummins (2012:41) states that in the “context of ‘English-only’ zone instruction that unintentionally marginalized students’ L1 knowledge and cultural experiences as largely irrelevant, students’ academic performance and confidence is diminished in a relatively short period of time.” Cummins (2012) therefore makes it clear that the language proficiency of learners in the medium of instruction is clearly linked to academic success. He cites research (e.g. Bialystok, 2006) which indicates that when bilingual students are supported in acquiring the language of instruction and are helped to develop L1 literacy skills they experience enhanced cognitive and metalinguistic functioning (Cummins, 2012).

Cummins coined the terms BICS and CALP after analysing more than 400 teacher referral forms and psychological assessments carried out on students who were learning English in a western Canadian city. The data showed that the students quickly gained conversational fluency in English but took longer to catch up to grade expectations in classroom literacy performance and in verbal components in cognitive ability tests. Cummins also shows that it only takes about 1 or 2 years for

students to become fluent in conversational English which is often context dependent and which relies on high frequency vocabulary and on common grammatical constructions. On the other hand it can take a minimum of 5 years for ESL learners to catch up to English native speakers in academic English. Cummins cites two reasons for this. The first is the relative complexity of the academic language which involves sophisticated grammatical constructions such as the passive voice for example. Secondly, a lot of high frequency and technical words are used in academic language and are seldom used in everyday conversation (Cummins, 2012).

In former Model C school contexts where English is the LOLT, ESL learners may have varying levels of communicative English language proficiency or BICS. Some may have had limited exposure to English at home. Some may have achieved a high level of proficiency in English and be completely bilingual and could perhaps have native-like proficiency. Still others may have had exposure to English at nursery school. Smyth (2002:55) summarises Vygotsky's (1986) description of how learning occurs, which has assisted us in understanding why the maintenance of home language and building on the BICS of learners in their predominant language is vital for learning. Vygotsky (1986 cited in Smyth, 2002:55, 56) distinguishes between two types of concepts namely spontaneous concepts and scientific concepts which may in some way be related to the BICS and CALP competences distinguished by Cummins. Spontaneous concepts are concepts that children develop contextually and unconsciously from their everyday life, while scientific concepts are concepts that are learned through mediated experiences between children and adults. Scientific concepts are described as abstract and systematic while spontaneous concepts are learned unconsciously. Vygotsky believes that spontaneous concepts give rise to scientific concepts and scientific concepts give conscious control to spontaneous concepts. Smyth (2002) asks what the implications of this are for learners who do not use their home language as the language of learning and teaching. Smyth (2002) asks whether spontaneous concepts learned in the home language meet and merge with scientific concepts learned in a second language. Smyth (2002:57) cites research conducted in

Zimbabwe by Roller (1998) where it was found that unfamiliar concepts learnt in English did not transfer into Shona and that the only instance of transfer was when children recognised words in English with those of a similar meaning in Shona. This indicates that scientific concepts learnt in an additional language do not develop down and link with spontaneous concepts.

This is broadly what can be referred to as Vygotsky's zone of proximal development which is the distance between a child's actual cognitive ability and their level of potential development (Brown, 2000). Closely related to this would be Krashen's Input Hypothesis where Krashen (1981:100, cited in Brown, 2008:278) states that an important "condition for language acquisition to occur is that the acquirer understands (via hearing or reading) input language that contains structure a bit beyond his or her current level of competence... If an acquirer is at stage or level i the input he or she understands should contain $i + 1$ ". Brown (2008:278) explains that this means that the level of language that learners are exposed to should be just far enough beyond the current competence that they can understand but challenge them to make progress. Conversely, the input should not be so far beyond their reach that they are overwhelmed, for example at a level of perhaps $i + 2$.

Thus, the child reaches his or her potential through interaction with adults and peers. We can therefore deduce that children who do not develop beyond BICS level in their home language would struggle academically. Concepts taught in English would not be able to link down to concepts learned in the home language. Academic language learned or heard in the classroom only, may be at a level that does not resonate with the language that the learner possesses and this would have implications for learning to read. Phonological and phonics awareness is important for learning to read. Without this awareness in the language in which literacy is being learned one would imagine second language learners may struggle. Furthermore McGuiness (2005) indicates that while vocabulary plays little in the role of learning to decode it plays a significant role in reading comprehension. Thus, learners whose vocabulary may be not as developed as their first language peers may lag behind in reading comprehension as well as in understanding context reduced classroom discourse.

Many parents opt for the “straight for English” option in schools as it is often the belief that children acquire language in much the same way as they learn their first which is simply through exposure and interaction with other speakers of the language. They may feel that there is no need for explicit or direct instruction in the target language.

Brown (2000) outlines various schools of thought with respect to language acquisition. He outlines the basic nature vs. nurture debate that confounds linguists, psychologists and educators by asking if language is a set of habits or is a system of internalised rules. The behaviourist stance states that children are born with absolutely no knowledge about language and learn language after being conditioned to respond in the desired ways after the correct degree and scheduling of reinforcement (Brown, 2000). On the other hand there is the nativist approach of Noam Chomsky discussed earlier, who suggests that children are born with a “Language Acquisition Device” (LAD) or an innate knowledge that enables children to master language over a very short period of time.

Constructivists like Lev Vygotsky and Jean Piaget proposed what can be termed as schema theory, where the emphasis is placed on the active process of construction of meaning. Lemmer (2002:40) indicates that generally the “child’s linguistic development depends on the product of the inseparable and interactive influences of maturation and learning.” Within a normal developmental environment, children acquire their first language without conscious effort and attention to language on the part of caregivers.

However, it cannot be assumed that a similar process exists when it comes to learning a second language. Klinger et al (2008) highlight the differences between acquiring a first language and learning a second language. Firstly, learners acquiring their first language have many years to do this before they come to school. They get an opportunity to practise in context based environments and do not feel the pressure to have to apply the language in abstract ways. Goodman (1999:193-195 cited in Lemmer, 2002:40) further points out the pertinent characteristics under which a child acquires the first language. Language acquisition takes place during

infancy in the sphere of intimate human interaction and in the context of the family and culture of the child. The child receives intimate and personal attention. Parents engage in communication with their children and the child learns through response to adult language and through imitation of adult language and by so doing internalises the complexities of phonology, morphology and semantics. The child is also given the responsibility of learning at its own pace and the errors made by the child are not highlighted or directly corrected. Rather caretakers are more concerned by the truth value of the utterances rather than the grammatical accuracy and caretakers may simply model a correct response or complete a child's incomplete utterance.

Lemmer (2002) states that, not only do children learn the vocabulary and grammatical structures of language but they also learn the social functions of language within their speech community. They learn a pragmatic competence, which is a competence that involves knowing how to use language in a particular and context and for a particular purpose. Furthermore, strategic competence is acquired where children learn how to compensate for a breakdown in communication. They also learn sociolinguistic competence where they are to know how to start conversations and how to use language to interact effectively in a variety of social contexts.

Learning a second language in a submersion context is significantly different to the above first language acquisition process. Learners receive little intimate one on one individual interaction. Most learning takes place in a classroom which may have in excess of 40 learners. Emphasis is placed on correct utterances and grammatical accuracy is focused on. In a classroom environment, language is context reduced and may deal with abstract ideas and concepts. Learners are required to listen and the classroom may not be an environment where learners are viewed as having anything valuable to say and where they can test out their utterances. Lemmer (2000) indicates that in the process of second language learning, the learner moves towards the target form of the language which will have fewer and fewer errors. Just as with first language learners, second language learners make random errors and guess in an unsystematic way. Then they are able to move to the next stage when

they show more consistency in the use of a language item and then in the third stage they are able to correct errors and apply language rules in a consistent way. Learners may learn at their own pace depending on all sorts of variables such as individual differences, quality and quantity of input and other contextual factors. Krashen notes that in order for 'comprehensible input' to become 'intake' certain other criteria should be met. For example 'an open attitude, or low affective filter, and the presence in the input of aspects of language that the acquirer has not yet acquired but is developmentally ready to acquire' should be present (Krashen, 1997:17 cited in Williams, 2007:64). In the classroom situation the affective filter may be particularly high where learners are under pressure to understand the language and produce comprehensible input in order to succeed. It may only take about two years to develop colloquial everyday languages as Cummins (2012) indicates it but may take up to seven years for the child to be able to be successful in all social and academic situations.

2.3.3 The relationship between English language proficiency and academic success

Slavin and Cheung (cited in Klinger et al, 2008:33) note that the most effective programs for helping students develop their oral and written skills in English is for learners to learn to read in both languages at the same time, but at different times of the day. The reason for this is that then the skills learned in one language transfer to another, especially when teachers provide explicit instruction and opportunities to practise in both languages in meaningful ways. Lemmer (2000:45) cites MacDonald (1993) to illustrate the various skills that can be transferred to the second language from those learned in the first language. These include:

- metalinguistic knowledge about how a language works
- the organisation and sequencing of discourse similarities
- the story grammar of narrative
- the relationship of morpho-syntactic systems

- the process of preliteracy including the knowledge that books are to be read and handled in a certain way, and that books may contain different genres of discourse.

These are generalised skills of language acquisition that may be transferred from one language to another. For example metalinguistic knowledge about one language may not apply to another language but knowing the functions of nouns, verbs and adjectives may be useful and maybe applied across languages. However, aspects of one language may not be readily transferred to another. For example, in French nouns have masculine and feminine gender and this cannot be applied in English and in Mandarin Chinese nouns are preceded by a measure word which also does not apply in English.

As noted previously, the CAPS curriculum in South Africa aims to assist learners to develop oral and written skills in both their languages. Learners are exposed to English as a first additional language in their initial years of schooling and then the switch to English as the LOLT is made as late as Grade 6. Literacy is learned in both in the home language and in English as the First Additional Language. English is gradually introduced, oral proficiency is encouraged and then literacy is gradually taught. Learners who learn to read in English will be supported by their mother tongue literacy. When learning to read in a second language they will not have to learn a whole new range of skills. They will merely have to apply the skills learned in the mother tongue to the new language. As noted above however, this is a generalised set of skills and often what applies to one language may not always be applied to another.

However, in schools such as the one in which this study was conducted, the majority of learners are submerged in an English LOLT environment and are not given any support in their mother tongue at all. They immediately have to learn in English which they may or may not have been exposed to before they started school. The level of input they are given may be at a level of $i + 2$ or beyond as they are often exposed to the language in the classroom only and therefore have to interact with the language in abstract ways and context reduced environments.

Heugh (2002) indicates that the Threshold Report carried out by Carol MacDonald (1990) on behalf of the HSRC is arguably the most significant piece of research that has been done as far as language in education in South Africa is concerned. The Threshold Project looked at black pupils' transition from mother tongue instruction to that of English in standard three (Year 5). It was found that there was a substantial gap between the language competence that was required to understand language textbooks at standard three level and the competence that was anticipated had the learners benefited from the English as a second language in teaching in earlier years (Chick, 1992). Welch (2012:5) reports that the Threshold Report (Macdonald, 1990) found that children typically have approximately 700 words at the end of Grade 3 when at least 7000 are needed. The study also found that the vocabulary requirements for subject textbooks increase by 1000% in standard three and even learners who benefited optimally from the English as Second Language teaching would only have encountered less than half of the vocabulary required (Chick, 1992). This implies that learners would possibly only understand every tenth word in their textbook.

Furthermore, Chick (1992) reports that it was also found that learners would be unfamiliar with up to 60% of the syntactic elements found in standard three textbooks. Therefore, the research conducted in the Threshold Project showed that learners who switch to English as the main medium of instruction before they have sufficiently learned the new target language would not succeed. Lemmer (2000) explains that learners who have instruction from the beginning in a language that they can understand are able to develop concepts and learn to read, write and calculate. Heugh (1995 cited in Lemmer, 2000:46) argues that expecting learners in immersion programmes where their first language is not recognised or used to become competent users of English in three to four years is unrealistic and unreasonable. Heugh (2002) points out that nowhere in the research is there any evidence to show that English has been used as a successful language of learning for those who speak other languages at home. The problem in South Africa is that while the CAPS curriculum aims to address LOLT issues, approximately 20% of English Second Language learners are in schools where English remains the LOLT

and where learners are submerged in the language without receiving any schooling or support in their native tongue.

Westby (1994:341 cited in Van Rooyen & Jordaan, 2009:271) states that “in preschool years children learn to talk but as they move into school they talk to learn. In academic tasks, language is used in the service of thought.” This statement highlights the important role that language proficiency plays with respect to the academic performance of learners. Not only does it play a significant role in the development of reading as will be discussed later on in this review, it is essential for the understanding of classroom discourse. Language proficiency involves being able to understand the instructions of the teacher and being able to understand the lessons. Particularly in the early years of primary school, learners rely on their ability to understand classroom discourse and their ability to understand lessons more than they do on their ability to read. As their reading proficiency improves, they are increasingly able to “read to learn”. Thus, it can be seen that CALP distinguished by Cummins not only refers to reading ability but also refers to oral language proficiency which points to the ability to understand what is being taught and this would be particularly significant in the early years of primary school.

Van Rooyen and Jordaan (2009) indicate that one aspect of language for academic purposes is the ability to understand syntactically complex sentences. A complex sentence is a sentence that has one main clause and one or more subordinate clauses. In their study, the participants’ complex sentence construction abilities were correlated to their summative English mark and their most recent school report average mark. The Listening/Grammar subtest of the Test of Adolescent Language (TOAL) was used (Hammill et al, 1980 cited in Van Rooyen & Jordaan, 2009: 276). This particular language skill was found to be significant in view of the positive correlations that were found between the test scores, summative English marks and the school report average mark. It was also noted in the study that the scores of English second language speakers were significantly lower than their English first language peers, which indicates that in a context where learning takes place in an English LOLT together with first language speakers, ESL learners seem to always be chasing a moving target.

In a subsequent study, Jordaan (2011) investigated the semantic processing skills of Grade 1 English language learners. Semantic processing can be described as the understanding of meaning and refers to lexical acquisition which plays a significant role in reading comprehension (De Villiers, 2004 cited in Jordaan, 2011:518). The research was conducted in two different contexts. In the first context all the children were English Additional Language Learners (EAL) and were taught by EAL teachers. In the second context all L1 and EAL learners were integrated in the same class and the majority of teachers were L1 English speakers. There were advantages and disadvantages in both contexts. In the first context, the advantage would be that learners would learn according to a pace of EAL learners since the whole class comprised of EAL learners. In addition to this, it was felt that the teachers who were EAL speakers would be sensitive to the needs of the EAL learners. In the second context while not be able to receive home language support and having to compete against L1 peers, learners would have L1 teachers and peers to provide quality input. Once again, this study indicated that there were significant differences between the EAL learners and L1 learners. Children who were learning in an additional or second language were not at the same level as their monolingual peers. Learners in the first context achieved lower scores than the learners in the second context which suggested that there are strong contextual effects on the development of semantic processing skills in Grade 1. Clearly, from the above research, English language proficiency and competence are central to the academic success of learners in submersion contexts and this is an important issue the present study seeks to address.

Heugh (2002) argues the case for bilingual or multilingual education in South Africa. She indicates that a large quantity of research on the benefits of bilingual education in South Africa has been recognised in other parts of the world but largely ignored in South Africa. For example, Heugh (2002) shows that studies by Malherbe (1969) have been recognised and cited by leaders in bilingual education such as Jim Cummins. Jim Cummins (cited in Heugh, 2002:13) quotes Malherbe (1969) as follows:

“Not only the bright children but also the children with below normal intelligence do better school work all round in the bilingual school than in the unilingual school.”

Cummins (2012:1979) further asserts that “there is no indication that bilingual instruction impedes academic achievement in either the native language or in English.” In fact he goes on to argue that where differences in academic achievement were observed on average they favoured the students in a bilingual program. As indicated above, in South Africa policy formation is clouded by the debate between home language instruction and ‘straight for English’ options. The idea is that a choice between the two has to be made. But seeing as studies like that of Malherbe (1969) show that bilingual learners actually perform better than their monolingual peers why is it that South African learners who are bi-/multilingual are still not performing satisfactorily? As was argued above, in many instances learners, as is the case of those in former Model C schools, do not get sufficient support in their home language. Learners in contexts outside of former Model C schools may receive poor support in both languages and neither is developed sufficiently. Thus, it would seem prudent that the case for bilingual or multilingual education should be considered where, as Cummins interdependence hypothesis indicates, there is sufficient support in learners’ L1 to enhance and support proficiency in the L2.

Setati, Molefe and Langa (2008) argue for the strategic use of learners’ home language in multilingual classrooms without denying learners’ access to English. Setati et al (2008:15) suggest that “multilingual learners have a unique and specific language configuration and they should therefore be considered as the sum of two or more complete or incomplete monolinguals.” Thus, a case for using multilingual teaching strategies in the classroom is made. Clearly again, language proficiency is linked to academic success. In this case language proficiency in both the learners’ L1 and L2 is considered crucial for academic success. Bilingual or multilingual teaching strategies that consciously use the learners’ home language in the classroom can be an important resource in developing learners’ language proficiency and improving academic performance.

2.3.4 Socio-economic status (SES) and English language proficiency

White (2006:202) defines socio-economic status as “an individual’s position on the socially valued hierarchy of occupations and income and its impact on their life chances.” A low socio-economic status implies that an individual may be exposed to limited health and medical care, may not have easy access to informal financial assistance and may have limited education. Additionally, those of lower socioeconomic status have higher unemployment and mortality rates. They more often than not do not own their own homes and may be exposed to overcrowding and slum dwelling.

One of the possible contextual factors mitigating the performance of the EAL learners in the study by Jordaan (2011) was the fact that it was possible that the EAL learners in context one (where EAL learners were taught by EAL teachers) were from lower socio-economic backgrounds. Hoff (2005) points out that lower socio-economic status can have a negative impact on language development.

Hoff (2005:403) states that there are SES associated differences in children’s vocabulary and therefore SES related in differences in reading skill. Research in reading indicates that learners from higher a SES outperform children from lower a SES on measures of reading. Furthermore, Lemmer et al (2006:53) point out that learners from a disadvantaged background often face general linguistic deprivation. This may be due to a lack of books, magazines and newspapers as well as radio and television in the home.

Verbeek (2010) states that research from a variety of cultures and countries shows that the SES of a family would likely affect the language experiences that a child would have. Verbeek (2010:40) cites numerous studies (Hart & Risley, 1995; Heath, 1983; Wells; 1986) that indicate that children from a lower SES are exposed to fewer words and to less analytical discourse about these words than their more privileged counterparts. He further shows that these social class issues are compounded when children study in a second language. Juel, (2006:412 cited in Verbeek,2010:40) reports that at the start of Grade 1 the difference in oral

vocabulary between linguistically advantaged and linguistically disadvantaged children in America is estimated at 15 000 words.

Lemmer et al (2006:58) assert that when children are denied proper “access to literacy they are denied the opportunity to develop fully and are unable to participate in the workforce to engage responsibly in civil life.” In addition, parents in lower socio economic strata may be illiterate or semi-literate themselves and there may not be in a position to encourage and support literacy. Pretorius and Ribbens (2005) show that learners have varying access to print materials based on their SES. Often parents are financially unable to provide access to print materials or provide opportunities for their children to engage in print materials. Books and magazines are expensive and parents lack the resources to provide these. Van Staden (2011) illustrates the importance of early pre-reading skills and reading proficiency. She states that early literacy exposure is imperative for the development of early literacy skills.

It stands to reason therefore that socio-economic factors do play a significant role as Statistics SA (2012b) reports that approximately 36.4% of the South African population live below \$2.50 (R9.63) per day. However, as noted earlier, in the SACMEQ study while South Africa ranked last in the test administered it was only the tenth poorest out of the countries surveyed. Therefore, other variables besides students SES seem to be at work. However, learners’ SES is significant. Cummins (2012) argues that SES issues such as those mentioned above can be mitigated if literacy engagement is a primary focus of a balanced reading program from the earliest stages of reading instruction especially if the students’ access to print is limited. Cummins (2012: 1977) cites a study by Guthrie (2004) where it was asserted that “students whose family background was characterized by low income and low education, but who were highly engaged readers, substantially outscored students who came from backgrounds with higher education and higher income, but who were less engaged readers.” He also asserts that students whose identities have been devalued in society possibly due to SES can benefit from instruction that affirms their identities within the context of the school. He argues that engaged reading can overcome barriers to reading achievement which may include parental

education and income. Therefore teaching strategies that affirm learners' languages and provide support for these languages can assist learners from impoverished backgrounds.

2.4 English reading ability

2.4.1 What is reading ability?

There has been a lot of research into reading and what constitutes reading ability. It has been viewed as an extremely complex activity involving the “complex organisation of patterns of higher mental processes” (Gates, 1949 cited in Hoover & Gough, 1990:127). Hoover & Gough (1990) agree that there are complex processes at work involved in reading but that these have their root in language use and in language abilities already possessed by the reader. Reading would therefore simply involve using language abilities in response to a written as opposed to oral form. It would therefore stand to reason that reading is simply a decoding ability used in conjunction with linguistic ability or listening comprehension. This gave rise to what is now termed the Simple View of Reading where reading ability can be divided into two component parts namely those skills associated with decoding or recognising printed words, and comprehension. Hoover and Gough's (1990) Simple view of Reading indicates that decoding involves being able to understand the correspondence between the letters or graphemes of the written word and the phonemes of spoken words. Comprehension on the other hand refers to being able to understand the text and where meaning is extracted from the text.

Hoover & Gough (1990) indicate that reading problems could stem from the three following possibilities:

1. Weak decoding skills but sufficient linguistic comprehension.
2. Weak linguistic comprehension but sufficient decoding skills.
3. Weak decoding skills and weak listening comprehension skills.

Thus, a person may be able to decode fluently - “bark at print” - but still not be able to comprehend what is being read. For example, as a second language learner of

Mandarin I am able read the Pinyin transcription of Chinese fluently as I am aware of the phonological code but am still not able to completely comprehend the text. Furthermore, a person with dyslexia may not be able to decode the written word but after hearing a text or completing an exam orally may be able to comprehend the text quite successfully.

Hoover and Gough (1990) also indicate that reading is not a linear process where decoding ability precedes comprehension. Rather, they occur at the same time and are intrinsically intertwined. For example, word recognition often depends on prediction through its position in context and thus it becomes clear that these two abilities occur at the same time and are clearly interdependent. Therefore reading ability can be seen as a product of decoding ability and listening comprehension. Listening comprehension involves taking lexical information which is semantic information at word level (Hoover & Gough, 1990:131) and using it to derive sentence and discourse interpretations. Decoding would involve being able to use the language code to access the mental lexicon. Thus, learners who are learning to read in a language that is not their first language are already disadvantaged as they may be unable to access this mental lexicon in the second language. When learners arrive at school they have a mental lexicon in their L1 that is ready for CALP. However, when learning to read in an L2 they may struggle with decoding and battle to make predictions through context or semantic clues.

As mentioned in Chapter One, Beck and Carpenter (1986) indicate that both cognitive and linguistic processes are involved in reading. For example, readers not only relate information within a sentence but also within a text. They make references to items previously mentioned in a text and thus have to have an internal text memory skill. Also, they have certain knowledge of the world which can be termed a 'schema' in which to slot what they read. "Schema" refers to the way our brains organize concepts and store concepts we that already know. We are able to learn new information if we are able to connect it to what we already know. This of course relates to Vygotsky's Zone of Proximal Development theory where learners learn new concepts just beyond their present level of development or where scientific concepts are built onto pre-existing spontaneous concepts. Thus, a certain

amount of the reader's own background knowledge and sociocultural bias also affects reading comprehension. This has implications for texts that are selected for learners. As mentioned above learners of lower SES households have little exposure to text, and background knowledge may be limited to due to the lack of exposure to books, television and radio and other sources that provide learners with background information and knowledge of the world. Often texts selected in reading programs may have a Eurocentric bias which does not draw on the sociocultural background of the learners. Often in the case of former Model C schools readers from reading programs 20-30 years ago are used which are not only old and outdated but do not relate to the sociocultural bias of learners.

However, readers also need to have an awareness of text structure and how it will be organised. As mentioned above, learners of lower SES are generally not exposed to books and reading on the laps of their parents and may consequently lack awareness of text structures and what is known as bottom-up and top-down processes are not identified. Bottom up theorists view reading as a linear process where readers start from the smallest units of print namely the recognition of letters as the representation of sounds. Then these letters as the representation of sounds combine to form words which in turn form sentences, paragraphs and eventually a whole text. Thus, reading is seen as a maturational process where gradual progression is seen from one level to the next. One of the best known advocates of this model is Rudolph Flesch. He believed that a child could be taught "letter-by-letter and sound-by-sound until he knows – when he knows it, he knows how to read" (Flesh, 1955:121, cited in Verbeek, 2010:16).

On the other hand there are proponents of the top down processes where attention is paid to the meaning aspect of reading. The top down view of reading sees reading as more of a cyclical process where reading involves "visual, perceptual, syntactic and semantic processes which all contribute to comprehension" (Verbeek: 2010:20). Carroll (1985), states that the essential skill in reading is deriving meaning from a printed or written message. This process is very similar to getting meaning through oral communication albeit the cues are different. For example, Carroll (1985) indicates that when you are getting the meaning of a verbal message you

have to recognise the words themselves, you also have to interpret the words and the fact that they have certain grammatical functions. You have also made a semantic interpretation of the sentence in that meaning is assigned to the key words of a sentence. In addition the context in which the utterance is made would also contribute to the understanding or sense making of what is meant.

Carrol (1985) further shows that while reading, in addition to getting the simple meaning of a text, you are bringing your own experience to the text. You may be reacting to it in a variety of ways. You may be checking it against your own experience or knowledge or you may be evaluating it for its truth, significance, importance or validity. Thus, meaning is obtained through an interaction between the reader and the text. Therefore top down processes refer to what the reader brings to the text.

Goodman (1967/2003, cited in Verbeek, 2010:21) also makes it clear that readers often use a “psycholinguistic guessing game” to explain how they construct meaning from a text. Thus, reading may not always be a precise identifying of letters and words but may involve using cues to make appropriate guesses. This involves being able to make inferences and to make predictions about where a text is going.

Verbeek (2010) also indicated that there is a balanced or integrated approach to reading ability where proponents believe that the two processes occur at the same time and that there is a process whereby meaning is achieved both from the bottom up and from the top down. Here reading can proceed from the smallest unit to meaning or from meaning down to smaller units.

Carrol (1985:29-31) identifies various components of reading skill which encompass both aspects of bottom-up and top down processing skills. These are:

- i. The child must know the language that he is going to read.
- ii. The child must learn to dissect spoken words into component sounds.
- iii. The child must learn to recognize and discriminate the letters of the alphabet in their various forms.

- iv. The child must learn the left to right principle, but initially only as it applies to complete words in continuous text.
- v. The child must learn patterns of correspondence between letters and sounds, and knowledge of these will help the child recognise words that he already knows in his spoken language and will help him determine the pronunciation of unfamiliar words.
- vi. The child must learn to recognise printed words from whatever cues he can use – their total configuration, the letters composing them, the sounds represented by those letters, and/or meanings suggested by the context.
- vii. The child must learn that printed words are signals for spoken words and that meaning can be apprehended from those printed words.
- viii. The child must learn to reason and think about what he reads within the limits of his talents and experience.

2.4.2 Reading comprehension

Understanding reading comprehension and the variables involved will assist in the implementation of appropriate strategies to develop reading and hence academic performance. Additionally, appropriate strategies that enhance reading that are specific to ESL learners need to be addressed, as these strategies may be particularly useful when geared towards improving oral English language proficiency in the case of these learners. Klingner and Geisler (2008) report five principles of reading outlined by the American National Literacy Panel on Language Minority Children and Youth (August & Shanahan, 2006 in Klingner & Geisler, 2008:59). The five principles are outlined as follows:

i Phonological awareness

Phonological awareness refers to the ability to identify and manipulate the parts of spoken language. Phonemic awareness is seen as a subcategory of this awareness

and refers to the ability to identify and manipulate the phonemes or sounds in spoken words.

ii. Alphabetic Principle

The alphabetic principle relates to the understanding of sound-symbol relationships. Thus, this would refer to the ability to know which letters form which sounds.

ii. Fluency

Fluency refers to the ability to be able to read relatively quickly, accurately and with expression. Fluency therefore requires both word recognition skill as well as comprehension.

iv. Vocabulary

Vocabulary affects comprehension and therefore plays an important role in deriving meaning from the text. It is important for learners to understand the underlying concept to which a word refers. Often ESL learners may be able to decode the words but may not understand what they mean and may only be 'word-callers' or are simply 'barking at print'.

v. Reading comprehension

Reading comprehension is regarded as the ultimate goal of reading. Snow (2002, In Klingner & Geisler, 2008: 65) states that reading comprehension involves a "complex process of constructing meaning by coordinating a number of processes, including decoding, word reading and fluency along with the integration of background knowledge and previous experiences."

Klingner and Geisler, (2008) add that the two other principles that should be considered in addition to the above are motivation and oral language. Motivation has been cited in many studies as a crucial variable in learning. Motivated students definitely learn better. Snow, Burns and Griffin (1998 in Klingner & Geisler, 2008:68) state that one of the principle reasons why students struggle to learn to read is a loss of motivation. As noted earlier there is a definite connection between oral language

proficiency and literacy acquisition. It stands to reason that if oral language proficiency is weak then reading will be affected.

2.4.3 The role of inferencing in reading ability

Cromley and Azevedo (2007) report various studies on reading comprehension and the various variables that are significant in influencing comprehension. These include background knowledge, cognitive and metacognitive strategies, inferencing, word reading and reading vocabulary. If teachers understand what learners are struggling with, they are able to implement the appropriate interventions. However, reading does not purely involve any one of these skills. Rather these skills are involved in a reciprocal and closely overlapping relationship. Cromley and Azevedo (2007) refer to the hypothesis that there is close relationship between the five above mentioned skills known as the DIME model. This refers to the Direct and Inferential Mediation model which looks at explaining the variance in comprehension in the ninth grade students that were studied. Their study noted that the most significant factors in reading comprehension were that of vocabulary and background knowledge. Inferencing, strategies and word reading had less of a significant impact. Thus, Cromley and Azevedo (2007) suggest that teaching strategies that enhance vocabulary and background knowledge may be the most suited to enhancing academic reading comprehension.

However, Pretorius (2000) gives inferencing a pivotal role in reading comprehension. She points out that in current theories of reading, reading is considered to be a process involved with the construction of meaning. Much of the meaning derived from the text is through the process of inferencing where the meaning of the text is not necessarily explicitly stated but deduced; not only by means of our background knowledge but also from the elements of the text. Schank (1976 in Pretorius, 2000:36) concludes that inferencing is “the core of the understanding process”. Therefore the implication of this is that inferencing is crucial to reading ability.

Zulu (2007) in a study of the reading difficulties encountered by first year law students found that students’ greatest source of difficulty would appear to be in the making of connections between elements of the text. The students seemed to see

the elements of the text as distinct and different and fail to search back and forth in the text. Zulu (2007) therefore recommends that specific instruction be given with regard to the making of anaphoric and cataphoric inferences and in recognising the relationship between text elements.

In her study of Unisa Sociology and Psychology undergraduate students, Pretorius (2000) distinguished a taxonomy of different inferences that can be drawn up. They are as follows:

Anaphoric inferences	Vocabulary inferences	Text-semantic inferences	Thematic inferences	Academic inferences	Textual inferences
pronominal lexical	word meaning	temporal whole-part causal contrastive	main versus secondary ideas	research	discourse structure

(Pretorius, 2000:36)

Table 2.1 Inference taxonomy

A reading comprehension test was given to the students involved in the study which tested the various inference types. The study found that the better a student's inferencing ability, the better his or her chances of academic achievement (Pretorius, 2000). Pretorius also found that reading ability involves more cognitive-linguistic skills than linguistics, that are necessarily operative in oral forms of discourse. Reading therefore cannot only be a matter of decoding and listening comprehension, it involves complex cognitive processes as well (Pretorius, 2000). This notion is reaffirmed by Norton and Wolf (2012: 429 cited in Welch, 2012:6) as they explain:

Psychologist Steven Pinker (1997) famously noted that children are born "wired" for language, "but print is an optional accessory that must be painstakingly bolted on." Indeed, to be a successful reader, one must rapidly integrate a vast circuit of brain areas with both great

accuracy and remarkable speed. This “reading circuit” is composed of neural systems that support every level of language—phonology, morphology, syntax, and semantics—as well as visual and orthographic processes, working memory, attention, motor movements, and higher-level comprehension and cognition.

Bowyer-Crane and Snowling (2005) further confirm the importance of inferencing in a study using the Neale Analysis of Reading Ability II (NARA II) and the Wechsler Objective Reading Dimensions Test of Reading Comprehension (WORD). A large amount of test questions in the WORD reading test require an understanding of the literal words in the text while the NARA II questions require more cohesive and knowledge based inferences. It was found that the two tests measured different aspects of reading comprehension. Less-skilled comprehenders performed poorly on the NARA II test and the reason given for this is that this test needs more cognitive strategies to search for information from the text. It was found that not only do different tests tap into different inferencing skills but also that poor comprehenders may have comprehension problems confined to specific comprehension types.

As was noted previously, reading encompasses top down processes where readers bring to the text what they know about the world, their background knowledge and socio-cultural bias. Additionally, ESL learners may arrive at school with an L1 that is ready for the introduction of CALP. The L1, a cognitive tool that is available to learners and that can facilitate the cognitive processes required for reading is negated in favour of an L2 in the former Model C English submersion context. Cummins (2012) indicates that a learner’s L1 can be used as a cognitive tool to affirm a learner’s prior knowledge and experiences. He argues that bilingual or multilingual teaching strategies can encourage learners to access prior experiences that are encoded in their L1. Therefore ESL learners who are learning in an L2 may be disadvantaged when it comes to the use of cognitive linguistic tools such as inferencing ability in reading in the L2 as their most significant cognitive tool namely their L1 is not being used.

As noted previously, there have been many studies which indicate the significance of vocabulary in reading comprehension. Cooper and Van Dyk (2005) argue that vocabulary size correlates significantly with reading comprehension, although weakly with academic performance. They further suggest that it is a viable assumption that vocabulary size is a reliable index of the level of comprehension when reading. Additionally, an inadequate grasp of vocabulary is symptomatic of poor reading comprehension and poor academic performance.

Bowyer-Crane and Snowling (2005:189) further quote a study by Nation and Snowling (1998, 1999) which indicates that a problem in making inferences could contribute to the vocabulary deficiencies that poor comprehenders show. This therefore makes a case for the importance of developing inference abilities in ESL learners as developing these abilities enables them to develop vocabulary through being able to deduce the meaning of words from the context. Rupley and Nichols, (2005) also indicate that there is a reciprocal relationship between reading comprehension and vocabulary. As students' vocabulary grows so does their ability to comprehend texts and as their ability to comprehend texts improves their abilities to learn new words from their context in text improves.

In contrast to this, Pretorius and Ribbens (2005) point out that reading in English is a powerful means of improving English language proficiency and a means to improve academic performance. Therefore, they claim that it is prudent to improve reading as opposed to language proficiency as it is reading ability that needs to be improved in order to improve language proficiency. However, as noted above when learners are beginning to read, the process of decoding involves being able to make predictions from semantic cues in the text and also being able to use the language code to access the mental lexicon. If the learners' vocabulary and language proficiency is so limited that this cannot be accomplished then it can be argued language proficiency would need to be developed in order to improve reading proficiency. Therefore it is evident that a reciprocal relationship exists between language proficiency and reading ability and strategies that support the development of English language proficiency and English reading ability would best assist learners.

In well-resourced former Model C schools there is access to basal readers and often there is a library that provides learners with access to reading books. However, one of the shortcomings in reading programmes is that after Grade 3 very little explicit teaching of reading takes place. Additionally, basal readers are often read purely from an accuracy and fluency point of view. Little attention is given to teaching reading for meaning. Learners are often given 2 to 3 pages to read every day and what happens is that often the page learners will read is the last page from one story and only the first two pages of the next story. Learners therefore are not taught to read a story for the sake of extracting meaning from the story but rather to read the story purely to be able to pronounce all the words. From Grade 4 onwards reading strategies are not taught explicitly. If students' reading problems can be pinpointed to reading problems as far as inferencing ability is concerned then explicit teaching needs to address these shortcomings.

Johnson and Kress (1965:8 in Lesiak & Bradley-Johnson, 1983:8) differentiate three levels of reading levels namely:

Independent level (level at which a student can read on his/her own)

Word recognition (In Context): 99 percent

Comprehension: 90 percent

Instructional level (level at which a student can profit from instruction)

Word recognition (In Context): 95 percent

Comprehension 75 percent

Frustration level (level at which the student becomes completely unable to handle materials)

Word recognition (In Context): 90 percent

Comprehension: 50 percent

By Grade 7 it may be assumed that learners have mastered the decoding and word recognition aspects of reading but this is not always the case as many high schools complain about children who are in high school who still have reading decoding difficulties and are reading at frustration level. For example Pretorius and Ribbens (2005) found that two of the Grade 8 pupils in their study had distressingly low decoding skills. They were unable to identify simple, one syllable, high frequency words. This implies that something is very wrong with the way reading is taught in primary schools and it is a problem that needs to be addressed with the appropriate teaching strategies. As noted above, decoding and reading comprehension are not independent of one another and are also not linear in their relationship. In order to decode learners need to rely on semantic cues and also need to be able to use the language code to access the mental lexicon.

2.4.4 Second language oral proficiency and second language literacy.

The problems that ESL learners are experiencing in reading can be attributed to problems with regard to language ability. As noted by Carroll (1985) the first and foremost skill necessary for reading is knowledge of the language in which you are learning to read. As is evident from the previous discussion on language proficiency, reading is an integral part of CALP and thus it would stand to reason that reading is a language based skill. In addition to this, linguistic abilities come into play in terms of linguistic comprehension, which is crucial to successful reading. Nation (2005) indicates that it has long been recognised that there is a close relationship between children's spoken language skills and their reading development. Children acquire literacy skills from a foundation of spoken language and thus it would be reasonable to expect that their reading system will depend on all aspects of language (Nation, 2005).

Nation (2005) cites numerous studies that indicate that phonological skills are fundamental to decoding. As indicated above reading ability involves the acquiring of the alphabetic principle which is the understanding of the sound-symbol relationship. There are many studies that indicate that there is a crucial relationship between phonological skills and learning to read. Semantic factors also influence the

word recognition process and its development. In a study that investigates the acquisition of the phonological rule that governs the pronunciation of all English words ending in /mb/ where the /b/ is silent or deleted leaving just the /m/ sound, (Nchindila, 2011) found that a combination of phonological, morphological and semantic elements influenced the pronunciation of words with these endings. Languages may be referred to as having deep or shallow orthography where there may be an explicit or less explicit correspondence between the spelling of the words and their sounds. English has a deep orthography where there is often a lack of correspondence between the way a word is pronounced and its sound. Second language speakers whose first language may have a fairly consistent sound-symbol correspondence may over generalise the sound-spelling rule and may lack the semantic knowledge that mother tongue English speakers may apply that assists with the application of this rule. This fits with what Nation (2005:47) states, that a connection can be drawn between oral language skills and comprehension ability. She shows that “poor comprehenders’ language skills are characterised by a relative weaknesses in dealing with the nonphonological aspects of language, ranging from lexical level weaknesses (vocabulary) through to difficulties with morphosyntax and the interpretation of non-literal language.”

Verhoeven and Leeuwe (2012:1805) demonstrate that the Simple View of Reading proposed by Hoover & Gough (1990) can be applied to second language reading as well. In their study the word decoding and listening comprehension skills of first language learners and second language learners of Dutch were related to their reading comprehension abilities throughout the primary grades. The study found that the decoding levels of the two groups was more or less equal but that the L2 learners lagged behind their L1 peers in both listening and reading comprehension. It was clear that the children learning to read in their second language experienced difficulty in achieving the same levels of skills as their native language speaking peers. It was also shown that the reading comprehension achievement of L1 and L2 learners could be predicted from their listening and word decoding abilities. The data with respect to reading comprehension achievement also showed that in the intermediate grades, word decoding was less predictive of reading comprehension

than was listening comprehension. Thus, listening comprehension has a greater impact on reading comprehension. Verhoeven and Leeuwe (2012) indicate that other studies have found that the significant effects of word decoding continue into the higher grade levels. In these studies the reading of English was involved and the deep orthography of English can perhaps explain why this would be the case.

Cummins (2000 cited in Pretorius & Mampuru, 2007: 39) asserts that there are over 150 empirical studies that show that additive bilingualism has positive effects on learners' cognitive, linguistic and academic growth. Additive bilingualism involves the learners' mother tongue being supported and developed at the same time as learning takes place in another language. The notion of additive bilingualism is supported by Cummins' (1979) language interdependence principle where it is asserted that skills achieved in the L1 can be transferred to the L2. As reflected by the aforementioned research, reading skills achieved in the learners' home language were transferred to those in the second language.

In former Model C schools in South Africa, this is certainly not the case. Learners find themselves in submersion contexts where subtractive bilingualism takes place. The learners receive no support in their L1 and all learning takes place in their second language which they may or may not be orally proficient in. Teachers may not know anything about their L1 and are unable to support them in anyway. Learning in this environment can only serve to have negative influences on learners' academic and cognitive development.

As noted previously Banda (2009) argues against an either/or approach where he notes that adding another language after the learner has reached a certain linguistic threshold is counterproductive in the South African context. He states that both or multi languages form part of the linguistic repertoire of African children and therefore the two (or more) languages are important and need to both be developed as part of the child's repertoire. Banda (2009) therefore lobbies for models that account for linguistic repertoires as opposed to a pedagogy of one mother tongue.

Owen-Smith (2013:95) reports on a multilingual approach used to teach Foundation phase numeracy. In her model she makes use of "language buddies" where

learners of same or similar language groups are seated next to each other and talk in their common language in order to facilitate thinking. Learners work on problems in their various home languages. Learners access resources that contain bi-text i.e. text that is in English as well as the learners' home language. Learners are therefore able to interrogate subject content and are able to think in their home language. The teacher does not necessarily have to be able to speak all of the learners' languages as they are able to interact with a peer. Owen-Smith noted that this multi-bilingual model of teaching made a substantively positive impact on performance in numeracy in the Grade 3 classroom studied.

Stanovich (1986 cited in McGuiness, 2005:205) coined the term Matthew effect based on a scripture in Matthew 13:12 where it states that "to those who have, more will be given – but from those who have nothing, even what they have will be taken away." According to the Matthew effect, children with weak language skills and poor instruction will achieve poorly academically and will have falling IQ scores. Conversely, children with good language skills and good reading instruction will achieve academic success and have higher IQ scores. Therefore in contexts where L2 learners find themselves in the same classroom as their L1 peers they find themselves continually chasing a moving target as their poorer L2 reading ability would cause them to fall further and further behind their L1 peers.

A study conducted by Aarts and Verhoeven (1999) indicates that minority students in submersion contexts suffer from negative effects in terms of literacy skills. Aarts and Verhoeven (1999) studied the literacy levels of Turkish minority learners in the Netherlands in Grade 8 with a mean age of 12.7. They looked at both functional and school based literacy. The Turkish minority learners' literacy levels were then compared with the literacy levels of their Turkish and Dutch monolingual peers. It was found that the Turkish minority students did not develop the L1 proficiency of either their Dutch or Turkish peers. They were two or three years behind their Turkish peers and they were substantially behind their Dutch peers in terms of literacy levels and academic competence. Their literacy levels were further analysed and it was found that as far as *decoding* skill was concerned their literacy levels were on a par with native speakers. Thus, it is evident that decoding skills can easily

be transferred from an L1 to an L2. It was further noted that there was not too much of a difference between L1 and L2 speakers in terms of functional literacy. The L2 speakers performed with native like proficiency. Significant differences were noted between school based literacies where L2 speakers lagged two or three years behind their peers. It was also observed that there seemed to be a relationship between functional literacy and school based literacy and it was further found that instruction in the L1 (Turkish) enhanced school based literacy in the L2 (Dutch), (Aarts & Verhoeven,1999). This study clearly indicates that ESL learners in submersion contexts suffer negative effects in terms of literacy skills. It affirms the interdependence hypothesis of Cummins (2012) where it is suggested that L1 support enhances competence in the L2 and therefore highlights the importance of the L1 instruction in reading. It also indicates that improved language proficiency in the L1 transfers to improved literacy in the L2. However, the findings were complex in that they suggested that L1 support and not reading improved academic performance amongst ESL learners.

2.4.5 English reading ability and academic performance

Pretorius (2002) conducted two studies which investigated the relationship between reading and academic performance. The studies were conducted with students at undergraduate level. The first study aimed to see whether the reading of expository tests was related to academic performance. Additionally, the study looked at how English language and reading proficiency compared in relation to academic performance. The reading scores of Medical University of South Africa (MEDUNSA) students obtained through a series of reading tests were compared with marks achieved in the final exam, in two subjects for which they were registered. The students were divided into three academic groups based on their average academic performance namely, Fail (below 49%), At Risk (50-59%) and Pass (+60%). Then the students' scores on a norm-referenced English language proficiency test were also assessed in relation to the three academic groups. The study showed a strong relationship between English reading ability and academic performance. It was clear that the better a student's English reading ability the better his/her academic achievement. The study indicated that English language proficiency per se is not as

robust an indicator of academic performance as English reading ability. It can be argued, however, that this may only be the case with students at university level where reading is crucial for learning. Additionally, these students may have been exposed to English language for a longer period of time than learners in primary school. Furthermore, the MEDUNSA students have also more than likely written a matriculation examination in English and may therefore have developed significant English language proficiency.

The second study compared the reading comprehension scores of University of South Africa (UNISA) students enrolled for a Mathematics Access course to the students' academic performance in Mathematics. The reading comprehension test specifically focused on the ability to comprehend mathematical questions in a mathematics examination. The students were also divided into the three academic groups as in the first study, based on their performance in the mathematics examination. The results showed that those who passed their Mathematics examination obtained higher reading scores than those who failed or who were at risk for failure. Pretorius (2002) notes that the results of the study from the Mathematics group were of particular interest in that reading ability played an important role even in a subject that was more associated with logic-deductive skills.

Pretorius (2002) argues that learners' poor English reading comprehension problems may not necessarily come from poor English language proficiency. If this was the case then all mother tongue speakers would be good readers in their mother tongue. Pretorius (2002) asserts that reading ability and language ability are not necessarily the same thing. She cites studies by Hacquebord (1994) that indicate that improving language ability does not readily improve reading ability. Rather, Pretorius (2002) asserts it is attention to reading that improves reading skill and therefore in the process, language proficiency also improves.

In another study, Pretorius (2000) argues that reading skills do not necessarily draw on the same skills as listening comprehension. She states that reading makes use of specific cognitive-linguistic skills that are not necessarily used in oral forms of discourse. She pays particular attention to the skills of inferencing as previously

discussed. Her study found that weaker students were engaged less in inferential activity and were less successful in engaging in higher more complex forms of inferential processing within a text based context. The weaker students seemed to be less skilled than their stronger counterparts at:

- integrating the meanings of successive sentences or paragraphs;
- identifying main ideas or overall gist in text;
- resolving anaphoric references;
- inferring the meaning of unfamiliar words when linguistic/semantic clues do occur in the context;
- detecting inconsistencies in the text;
- perceiving how parts relate to wholes;
- perceiving causal and contrastive relationships between items of information in texts;
- making more abstract inferences from specific details

(Pretorius, 2000:45)

The study conducted by Pretorius (2000) looked at the English reading ability and English language proficiency of ESL learners at university level and how these variables compared in relation to academic performance. The present study aims to investigate the English language proficiency and English reading comprehension of ESL learners at Grade 7 level. In primary school, reading is not as crucial for learning as the case for undergraduate students. Learners still depend extensively on ‘teacher talk’ and classroom discourse, and may not have developed the English language proficiency that university students who have written a matric examination might have. The current study similarly correlates the reading scores of learners on the *Neale Analysis of Reading Ability* (NARA III, Australian standardisation, 1999) their academic performance in terms of the summative assessment mark received at

the end of the term. Also, English language proficiency is correlated with performance on a norm referenced English Language Proficiency test namely the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992). The performance on these tests was also compared with performance in Mathematics and Social Sciences. In this respect, there are similarities and differences between Pretorius (2000) and the current study.

Nation (2005) also suggests that poor comprehenders' difficulties may not always necessarily come from oral language weakness but may come from a lack of reading experience. She cites a study by Nagy and Anderson (1984) that argues that from the beginning of the third grade, the amount of free reading children engage in is a major determinant of vocabulary growth. Pretorius & Ribbens (2005:145) illustrate the importance of reading as a learning tool. While they state that language proficiency and reading are clearly related they argue that through reading learners develop valuable language and cognitive skills. They state that reading is probably the most empowering tool that learners need and is absolutely crucial to their academic success. However, as indicated by Hoover and Gough (1990) language proficiency and reading ability have a reciprocal relationship. It is not a linear process and the two are intrinsically intertwined. Language proficiency also plays a significant role in academic success. For example, as Jordaan (2011) indicates, semantic processing skills are essential for the understanding of complex sentences. Furthermore McGuinness (2005) asserts that ESL learners whose vocabulary is not as developed as their L1 peers will lag behind in terms of reading comprehension and in terms of understanding classroom discourse. Cummins (2012) also further indicates that one of the most significant tools a learner has is the ability to access experiences they have had in their L1 and to relate them to what is being read in the L2. Furthermore Cummins (2000, cited in van Rooyen & Jordaan, 2009) states that the academic language register encompasses both oral and written modes of communication and this would imply that both are essential tools for academic success.

In another study, Pretorius (2002) indicates that the way reading is taught in schools may account for the poor performance of learners. In instances where learners

receive mother tongue instruction during the first few years of schooling, reading ability and reading for pleasure is not fully developed in learners. There is a dearth of reading material available in learners' home languages. Most learners come from an oral culture where they are not exposed to storybook reading and a culture of learning. There are very few basal readers and resources in the majority of African languages. Murray (2009 cited in Welch, 2012:4) explains that in countries such as South Africa many children first encounter print in English and that there is often a shortage of print materials in their home languages teachers may not be able to read and write well in African languages themselves. Thus, it could be argued that it is extremely difficult to provide support for L1 literacy and language proficiency in the South African context due to a lack of resources in terms of books and teacher knowledge of the home languages. This may be a further challenge due to the fact that there may be learners from a variety of home language backgrounds in one classroom or one school. However, as noted earlier, there are multilingual teaching strategies that may be employed such the "language buddy" system suggested by Owen-Smith (2013).

Welch (2012) also argues that reading is not a natural or innate ability because the wiring of the brain takes a great deal of practice and a child that is exposed to books and who hears, handles and starts to read books is more reading ready than those who only begin to do so at school. However, in South Africa, as noted previously very little resources are available in the indigenous languages of South Africa. Saide (cited in Welch, 2012:7) indicates that South Africa has about 5000 books for children across nine languages and that the majority of these are readers and are mainly geared for phonics practice. Furthermore many schools are not equipped with libraries or computer centres and there is no formal post allocation for a teacher-librarian. Emphasis needs to be placed on developing a culture of reading amongst learners. Exposure to books and to information is essential and thus the provision of books and information to all learners in South African schools must be given priority.

Many studies attest to the fact that literacy levels of both undergraduate and postgraduate students at tertiary level are lower than what is needed for academic

success. Pretorius and Ribbens (2005) state that performance in reading, reflects the effectiveness of an education system. The poor performance of South African learners in the PRILS and SACMEQ studies mentioned at the outset of this chapter attest to this. Chall et al (cited in Ribbens, 2005:145) affirm that “reading science and social studies tests become an almost impossible task for students who cannot read (at this) level”. Therefore intervention studies need to be taken and measures put into place that address this dire situation. As has been argued above, reading ability and language proficiency are intrinsically intertwined and thus strategies that support literacy and language proficiency are crucial.

2.5 Conceptual Framework

The aim of a conceptual framework (Miles & Huberman, 1994:18) is “to explain either graphically or in narrative form, the main things to be studied – the key factors, concepts, or variables – and the presumed relationships among them.” In this section the concepts in this study will be clarified and the relationships between them will be briefly proposed. Clearly the concepts of English language proficiency and the English reading ability of ESL learners in the South African context are extremely complex. Obviously there is no quick solution to the problems faced by those learning in a second language. The learners who face a particular challenge are those who are learning in a LOLT that is not their mother tongue. These learners learn their first literacy in a second language which they may not yet be completely orally proficient in. This research aims to examine the relationship that English reading ability and English language proficiency has with academic performance. Pretorius (2002) asserts that increased English language proficiency may lead to increased BICS but not to increased CALP. This study aims to replicate the study of Pretorius to some extent in the context of learners in a primary school where the first literacy is learned in a second language and where the learners are taught in a second language from Grade 1. The relationships of English language proficiency and English reading ability to academic performance are compared in terms of the results of scores on an English reading test and a norm-referenced English language proficiency test.

Figure 1 illustrates the relationships between the variables that this study is concerned with. There is a relationship between language proficiency in the LOLT and academic performance (Lemmer, 2000; Akkinaso, 1999 cited in Kamwangamalu, 1997; Westby, 1994 cited in Jordaan, 2011, Jordaan, 2011; Cummins, 2012; Hoff, 2005). Evidence is also given that ESL learners who have support for their L1 perform better academically (Cummins, 2000 & 2012, Smyth, 2002, Lemmer, 2000; Malherbe, 1967 cited in Heugh, 2002; Heugh 2002; McDonald, 1993 cited in Lemmer, 2000). In addition, there is a relationship between reading ability in the LOLT and academic performance (Aarts & Verhoeven, 1999; Pretorius, 2000 & 2002). There is also a relationship between language proficiency and reading ability. Reading ability is definitely an aspect of language proficiency and is essential for CALP. However, language proficiency is also necessary for reading ability (Van Rooyen & Jordaan, 2009, Aarts & Verhoeven, 1999; Zulu, 2007; Nchindila, 2011; McGuinness, 2005). Pretorius (2002) argues that it is reading ability that improves language proficiency while Hoover and Gough (1990) suggest that there is a reciprocal relationship between language proficiency and reading ability. Both are related to academic performance. The study by Pretorius (2002) indicates that at university level, reading ability is most robustly related to academic performance in ESL undergraduate students. This study on the other hand is concerned with which of these is most robustly related to the academic performance of Grade 7 ESL learners learning in an English submersion context.

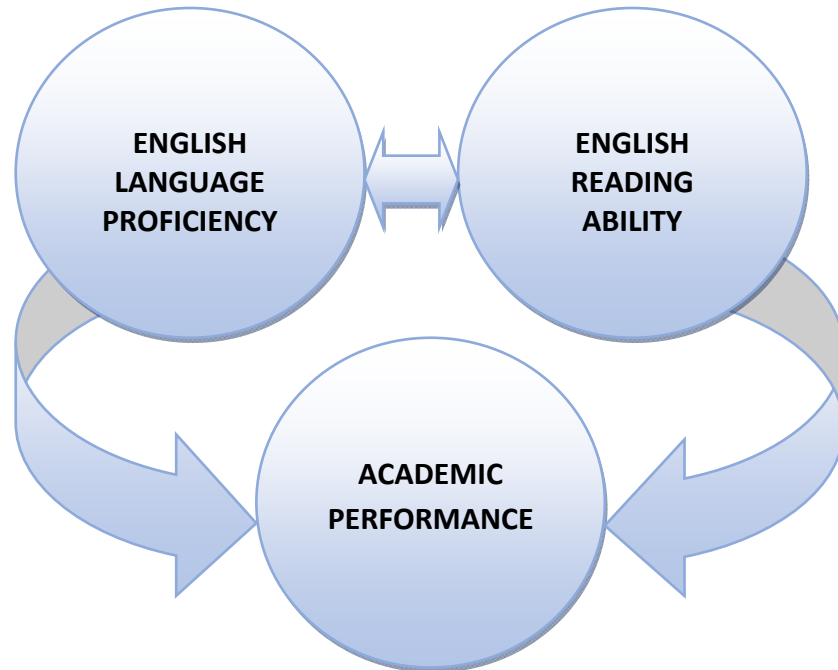


Figure 2.1 The relationship between English language proficiency, English reading ability and academic performance.

As is indicated by the review of literature in this chapter, there are varying arguments suggested as to the reasons for the lacklustre academic performance of South African learners. Some place the blame firmly on linguistic proficiency and indicate that where English language proficiency is lacking ESL learners will fall further and further behind their first language peers. Language proficiency is viewed as crucial to the development of reading ability. In turn reading ability is seen as crucial for improved language proficiency. English reading ability is seen as the most crucial tool in learners being able to progress and achieve academically. Learners have to be able to read to learn. It is argued that teachers need to pay attention to developing reading skills in English in order to best support learners. It is believed that only reading can improve reading. Improved reading will lead to improved language proficiency and will assist with vocabulary development. Understanding how to implement strategies and teaching interventions to assist learners in English submersion contexts can help teachers to provide much needed support. This study aims to look at whether it is language proficiency or reading ability that is most robustly connected to the academic achievement of Grade 7 ESL learners. In this

way learners in primary school can be supported, as a large body of research indicates that if all children in South Africa are to face an equal challenge at school, they should all be learning in their mother tongue or at least have support for their L1 in terms of being able to read, speak and think in their mother tongue. At this stage however, policy is not likely to change any time soon. Most L1 South African children will continue to use English as LOLT. Therefore, the onus is on teachers to take responsibility for giving their learners quality education in terms of multilingual teaching strategies, teaching reading for meaning and providing L1 support which will provide access to further opportunities and to enable them to become responsible citizens of the community.

2.6 Conclusion

This chapter reviewed the literature concerned with the literacy levels and academic achievement of primary school learners in South Africa. The variables of English language proficiency and English reading ability were defined in terms of the various studies and theoretical frameworks. Then studies that investigated the relationship between language proficiency, reading ability and academic performance were examined. In the next chapter, the research method will be considered. The research design will be discussed as well as what instruments were used to measure English reading ability and English language proficiency. The methods of data gathering and analysis as well as the ethical considerations and limitations of the study will be addressed.

Chapter Three

RESEARCH METHOD

3.1 Introduction

As discussed in Chapter One, the aim of this study is to investigate the relationship between language proficiency, reading ability and academic performance in Grade 7 ESL learners in English LOLT submersion contexts. In Chapter Two, the literature review related to the poor academic performance of South African learners and the reasons suggested for the poor performance were reviewed. Literature related to the variables of English reading ability and English language ability posited as possible contributors to the lacklustre performance of learners was also reviewed. Studies and their related methods that investigated the relationships between these variables were also considered in Chapter Two.

In this chapter, the quantitative research method employed in this study will be considered. The method employed in this study will be discussed in terms of the research design. The particular techniques used in the research and the reason behind their choice will be examined. Research instruments that were used and how the data was gathered will also be considered. The methods used in analysing the data will further be discussed. Finally, the limitations of this method will be briefly addressed.

3.2 The research design

As stated in Chapter One, traditionally research can be divided into two distinct areas namely qualitative and quantitative research.

Qualitative research assumes that all knowledge is relative, and that there is a subjective element to all knowledge and research (Nunan, 1992). Qualitative research is based on arriving at conclusions from the data examined. It is descriptive and subjective in nature. Qualitative research therefore involves the research of phenomena in their natural setting. It can involve methods like case

study, interview, observation, personal experiences and life stories. Deductions are normally made from the analysis of data. Hypotheses are not imposed on the data. Rather phenomena are observed and conclusions made from the data presented.

On the other hand, quantitative research involves the collection of numerical data to test a particular hypothesis and then involves an analysis of that data. Thus, quantitative research design involves using statistical procedures to analyse and report on the data. Methods used for data collection can include experiments, quasi-experiments, surveys, questionnaires and correlation studies. Jha (2008:48) refers to quantitative research as “hypothesis testing research”. This involves the use of a scientific process where at the outset an hypothesis is made and then an experiment or treatments is carried out to test the hypothesis. A statistical analysis is then made to test the results. The subjects are often selected at random so as to prevent bias and error.

Jha (2008) indicates that there is not necessarily a dichotomy in research methods but rather that there is a continuum involved ranging from completely qualitative methods to completely quantitative methods with mixed methods that may occur in between. This study falls under the quantitative research method. An hypothesis is suggested and is tested by means of a series of tests which are statistically analysed. The research in this study can be described as associative or correlational research.

Since this study is based on quantitative research, it is necessary to further examine the elements of quantitative studies. A quantitative study is divided into two groups namely associative and experimental. In both these types researchers attempt to find a relationship between variables. In associational research the aim is to determine whether a relationship exists between variables and the strength of the relationship. This is usually done statistically by means of correlations. This gives researchers an idea of how closely two variables are related in a given population. Association research is not concerned with cause and effect but rather with co-occurrence (Mackay & Gass, 2005).

3.2.1 Aims of the study

As this study is located in correlational research, its aim is to determine whether language proficiency or reading ability is most robustly correlated to academic performance. The purpose of the study is to determine whether the poor academic performance of ESL learners in submersion contexts can be more significantly attributed to poor English language proficiency or to poor English reading ability. This can assist teachers to identify areas in which learners need support and then implement appropriate support and intervention strategies.

In association research, the null hypothesis is often assumed where it is stated that there is no relationship between items being tested. It is the task of the research to indicate that there is a relationship between the two variables being investigated, thereby rejecting the null hypothesis (Mackay & Gass, 2005). A number is usually calculated to represent the relationship between variables and this is termed the correlation coefficient. The number that represents the coefficient can range from -1.00 to +1.00. A high positive value represents a high positive relationship (e.g. .86, .90, .97) and a low positive value (e.g. .42, .33, .06) represents a low positive relationship. A moderate negative value (e.g. -.42, -.33, -.06) would represent a moderate negative relationship and so on. A value of 0 would indicate no relationship. Therefore the strength of the relationship would become higher as the coefficient approaches +1.00 or -1.00 (McMillan & Schumacher, 2010).

Researchers also use the term significant to indicate that the coefficient is significant in the context of the correlations, to indicate that the coefficient is statistically different from zero (no relationship) at a specified level of confidence. The aim of experimental or correlational research is to reject the null hypothesis. Evidence is gathered so that the null hypothesis can be rejected. Chen (2010:1368) states that “once a test is chosen to deal with a given null hypothesis, the calculated value of the test statistic is compared with tables of critical values at specific level of significance. If the calculated value exceeds the critical value, then the null hypothesis is rejected.” Tests of statistical significance are measured in terms of a p value. Michaelson and Hardin (2010: 1362) further point out that “the p value is a

measure of how likely (or unlikely) it is for the collected data to have occurred given that the null hypothesis is true.” Consequently, a smaller p value means that if the null hypothesis describes the true state of things, a rare event has occurred. Depending on how small the p value is, the researcher might conclude that it is more likely that the null hypothesis is in error. Conversely, a large p value means that the data collected is more in line with what is stated in the null hypothesis.” Therefore the lower the p value is, the more confidently the researcher can reject the null hypothesis. If the p value is the same or less than .05 then the null hypothesis can be rejected and the statement can be made that the relationship is statistically different.

One of the most well-known correlation techniques used is the Pearson-product moment coefficient which is represented by r or the Greek letter ‘rho’. It is widely used and the calculation was readily available on the SPSS 22 software, Walk and Rudd (2010) report that this correlation coefficient was created by Karl Pearson in 1896 in order to quantify the degree of relationship between two variables. The variables are often denoted as X which is commonly labelled as the predictor variable and Y which is commonly labelled as the outcome variable. These letters are arbitrary as the roles of the variables are irrelevant in the calculation of the coefficient. In this study the variables of reading ability and language proficiency are regarded as the predictor variables and academic performance can be considered as the outcome variable. The Pearson-product moment correlation was used in this study.

McMillan and Schumacher (2010) indicate that it is important for researchers to select subjects that provide a range of responses on the variables. If the subjects are homogenous with respect to either one of the variables then a relationship between the variables is unlikely. In addition to this, instruments must be selected that are reliable and that will provide a wide range of responses. It is also suggested that a pilot study be conducted on similar subjects to ensure the reliability and variability in responses.

In this research, two studies were conducted in order to investigate the relationships between the variables of English language proficiency, English reading ability and academic performance as outlined above. The first study was a pilot study involving 18 Grade 7 learners in a former Model C school context.

A pilot study was conducted because a pilot study is generally considered to be a small scale trial of the proposed study. It investigates procedures, materials and methods of the study. A pilot study is important in that it seeks to test and revise the materials and methods to be used. It is useful in identifying and ironing out any problems before the final study is carried out and revisions and adjustments can be made (Mackey & Gass, 2005). The associative or correlational research method was used in both studies. The pilot study was a mini trial version of the main study. It was used to test the research instruments and their effectiveness. It was also a means of collecting preliminary data. It was hoped that the main study would confirm the results of the pilot study. The second or main study was conducted a year later in the same context and involved 36 learners.

3.2.2 Research question

The main research question in this study is:

Is English reading ability or English language ability more robustly correlated to academic performance in Grade 7 ESL learners in submersion context?

The following research sub questions were posed in order to address the above research question more rigorously:

- Is there a significant relationship between English language ability and academic performance amongst Grade 7 learners in a submersion context?
- Is there a significant relationship between English reading ability and English academic performance amongst Grade 7 learners in a submersion context?
- Which bears the more significant relationship to academic performance between English decoding and English reading comprehension?

- How robustly are English reading ability and English language ability correlated to the academic performance of Grade 7 learners in a submersion context?
- Between English language proficiency and English reading comprehension, which has the more significant relationship to academic performance?

3.2.3 Hypothesis

As the study is based on quantitative research, it is a hypothesis testing research (Jha, 2008). Therefore, in order to investigate the research questions the following null hypothesis was assumed:

- H₀ = There will be no difference in the relationship between English reading ability, English language proficiency and academic performance.

Both the pilot study and main study sought to reject the null hypothesis.

In both the pilot study and the main study students were divided into three groups with respect to their academic performance. This was done so that the average performance (%) each group achieved with respect to their summative term mark could be compared to their average (%) performance on the English reading test and the English language proficiency test. In the present study, a one-way ANOVA test was conducted to determine if the three groups' performance on each test was statistically relevant.

An ANOVA test provides information on whether or not groups differ in terms of results. It does not provide information with respect to the source or location of the difference. ANOVA tests involve a procedure called Analysis of Variance which compares the means of more than two groups. The test is referred to as an *F-test*. Nunan (1992) states that the analysis of variance basically compares the variability of scores within groups, with that between groups and the computations result in an *F-ratio*. The strength of an ANOVA test is that it can test the significance of the interactions between different variables. The null hypothesis is considered where it is assumed that there will be no significant difference in performance between the groups.

One of the assumptions of an f-test or one-way ANOVA test is that there is homogeneity of variance within the groups. Therefore homogeneity of variance must first be considered before the ANOVA test is conducted. In tests of homogeneity of variance the differences of variation within the groups is examined. Homogeneity of variance is tested by means of the Levene's test. If the result of the Levene's test is not significant then there are no significant variances within the groups and thus homogeneity of variance can be assumed.

As indicated in Chapter Two, the literature review, the research design employed in the present study has been used in similar studies in the past (e.g. Aarts & Verhoeven, 1999; Pretorius, 2002; Manyike & Lemmer, 2010). Pretorius (2002) found that there is a strong connection between reading ability and academic performance and that reading ability is a more robust indicator of academic performance than language proficiency. Correlation studies were also used in the study of Aarts and Verhoeven (1999) who investigated the first and second language literacy levels of 222 Turkish minority children living in the Netherlands. In the study by Manyike and Lemmer (2010), learners' performance on standardised reading and writing tests was tested. The results of the reading tests were correlated with those of the writing test and it was found that there was no significant relationship between reading and writing in English despite much of the literature indicating a complementary relationship between reading and writing. Therefore, correlation or associational research has been successfully used in second language literacy research. As such it was considered as an appropriate research design to examine the relationships between the variables examined in the study.

3.3 Methodology

As noted above, the present study was based on a quantitative design. In this section, I first discuss issues of validity and reliability in research. I then examine how these relate to my study in terms of how I defined and tested the variables of English language proficiency, English reading ability and academic performance. After that, I move on to discuss the research population. Lastly, I discuss methods of data analysis.

3.3.1 Research validity and reliability

As noted in Chapter One, reliability and validity are very important in research design. Mackay and Gass (2005:107) indicate that it is important for test results to be valid. They need to reflect what we believe them to reflect so that they not only have significance to the population that was tested but also to a much broader relevant population. Content, construct, face and criterion-related validity can be distinguished.

- **Face validity**

According to Hughes (2003), a test has face validity if it looks as if it is measuring what it is supposed to measure. Therefore, the face validity of a test instrument depends on the perceptions of the test takers. The tests used in the study appeared to measure what they are supposed to measure.

The test used to measure English language proficiency was the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) which aims to determine the proficiency level of English Second Language testees within the range of Junior Secondary Language Proficiency Levels (Grades 7, 8 and 9 – senior phase). This is the operational definition of intermediate level language proficiency. Therefore according to the title of the test it looks as if it is measuring what it is intended to measure. Please see Appendix 3 for a copy of the test instrument.

Reading comprehension in both the pilot study and the main study was assessed in terms of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999). Please see Appendix 4 and 5 for a copy of the texts used by the instrument and the relevant comprehension questions and scoring sheet. According to the test title, it appears to measure what it intends to measure. It also includes tests for those in Year 7 of schooling and can therefore test the reading ability of Grade 7 learners. Furthermore, it is also able to test both aspects of reading ability as defined by the Simple View of Reading where reading is seen as a product of reading comprehension and decoding. The test has both a reading comprehension component and a reading accuracy component.

Learners' academic performance is reflected summatively at the end of each term. Their summative assessment mark is based on continuous assessment throughout the term which may include a variety of assessment techniques including tests, projects, assignments, portfolio work and classwork. Learners are assigned various tasks and are assessed by means of a variety of forms of assessment, as well as a variety of assessment strategies. The learners' summative average term mark for all ten learning areas is therefore considered as indicative of the learners' overall academic performance. The 10 learning areas include: English Home Language, Afrikaans First Additional Language, Zulu Second Additional Language, Mathematics, Natural Sciences, Technology, Social Sciences, Economic Management Science, Arts and Culture and Life Orientation. The average term mark is calculated by using the learner's academic summative average over 10 learning areas for the term.

Teachers use the summative term marks to gauge learners' progress and to make judgments using them to determine whether or not learners will progress to the following grade. In Grade 7 reports of summative term assessment are seen as indicative of academic performance and are used to apply for acceptance into high school. Reports with summative assessments are viewed by learners, parents and teachers as indicative of learners' academic achievement. Therefore, the summative term average has face validity in terms of a measurement of academic performance. The summative term average for Mathematics and Social Sciences was also considered to have face validity as indicative of learners' ability in these learning areas.

- **Content validity**

A test is said to have content validity if "its content constitutes a representative sample of the language skills, structures, etc. with which it is meant to be concerned" (Hughes, 2003:22). Content validity therefore refers to the representativeness of our measurement regarding the phenomenon about which we want information from (Mackay & Gass, 2005). Therefore the items on a test must be representative of the *entire* domain that the test seeks to measure.

The *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) was used to test learners' language proficiency. The test is based on the assumption on a "testee's ability to indicate the correct answer from four possible answers regarding

- the denotation and connotation of words and phrases in sentences and reading passages as well as;
- the correct or most suitable language use as set out in the specification table, is a valid indication of his/her proficiency in English Second Language" (Reinecke, 1992:13).

The test comprises of 40 multiple choice questions. Testees have to select the correct answer from four choices for each item. The test is mitigated by reading ability in that learners have to read the test and read the questions in order to take the test. Additionally, at least 10 of the questions relate to the making of inferences with regard to what has been read in given passages. However, as is outlined earlier, language proficiency can be seen as a multi-componential ability that includes reading ability. Reading ability can be seen as an integral part of overall language proficiency and thus this test can therefore be regarded as a valid measure of language proficiency.

The following table gives a specification of the test content:

Skill being tested	Number of items
Recognising denotative meaning of words	1
Understanding details of content	9
Making general inferences based on a given text	6
Making inferences related to the writer's	1

Skill being tested	Number of items
intention	
Making inferences related to the main ideas	2
Recognising correct idiomatic use	5
Making inferences related to atmosphere	1
Recognising expanded meaning of summarised text	2
Selecting appropriate language for the situation	3
Selecting appropriate language for the situation	1
Selecting correct <u>use</u> of parts of speech	9

(Reinecke, 1992:12)

Table 3.1 Skills tested in the Proficiency test English Second Language: Intermediate level (Reinecke, 1992)

The *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) was used to test English reading ability. The definition of reading is highly complex, Neale (1999:5) postulates that 'reading behaviour mirrors the processes of thinking and is the co-ordinated expression of human behaviour.' Reading is also related to language proficiency. However, Pretorius (2000:175) notes that it must be kept in mind that language proficiency and reading, though clearly related, are 'conceptually and cognitively specific skills that develop in distinct ways and that rely on specific cognitive operations'.

Cain and Oakhill (2006) conclude that the NARA is an effective instrument used to identify those who display a disassociation between reading accuracy (decoding) and reading comprehension. Therefore this should be an effective instrument for identifying learners who have reading problems associated with decoding. By

Grade 7 it may be assumed that learners have mastered the decoding aspects of reading but this is not always the case as many high schools complain about children who are in high school but who still have reading decoding difficulties. Bowyer-Crane and Snowling (2005) further attest to the ability of the *Neale Analysis of Reading Ability* (NARA III, Australian standardisation, 1999) to test learners' comprehension ability related to the ability to make inferences. Anderson (1999 in Pretorius and Ribbens, 2005:142) indicates that reading speed is also strongly correlated with reading ability. Reading rate is measured in terms of words per minute and is closely related to the automaticity of word recognition skills. The *Neale Analysis of Reading ability* (NARA III, Australian standardisation, 1999) is therefore able to score reading accuracy (decoding), comprehension and the rate of reading.

As noted above, academic performance is regarded as the learners' average summative term mark of performance in 10 learning areas. Maree and Fraser (2004:50) define summative assessment in Outcomes - Based assessment as "achievement at the end of instruction in order to document learner performance after instruction has been completed." The National Assessment Policy (NDE, 1998: 19 in Maree & Fraser, 2004:50) states that this type of assessment requires the collection of "sufficient, appropriate evidence on which to base a judgement about achievement against the relevant national standard." The policy further indicates that assessors should include information about a learner's progress mainly from continuous/formative assessments made throughout the learning process. The summative assessment mark can therefore be considered as a valid indication of academic performance as it is obtained through sufficient evidence. As previously noted, a test can be considered valid if it is representative of the *entire* domain it seeks to measure. It can be argued that a single test cannot address all the learning outcomes and assessment standards in a single subject and therefore summative assessment that includes a variety of assessments has content validity in that the majority of outcomes and skills required by the learning area are assessed.

- **Construct validity**

Hughes (2003) explains construct as referring to any underlying ability which is hypothesised in a theory of ability. Bachman and Palmer (1995) indicate that construct validity pertains to the meaningfulness and appropriateness of the inferences we can make on the basis of test scores. In second language research a variable such as language proficiency cannot be directly measured as height or weight can for example. Thus, construct validity would refer to the extent that the research instrument can adequately capture the construct or underlying ability under scrutiny (Mackay & Gass, 2005).

At present, there are no standardised tests for language proficiency in South Africa. There are tests that have been devised for the HSRC but many regard these as out-dated. However, Manyike (2007) notes that these nevertheless do give a good indication of what is happening in South African schools and used the tests successfully in her study. These tests do contain a reading and writing component and it is the aim of this study to extract the reading ability variable from that of language ability. However, the instrument devised for the HSRC by Reinecke (1992) for intermediate level language proficiency was still used as it is generally regarded as indicative of language proficiency and has been used with effect in the study of Manyike (2007). Another concern was that the test had to be read to be completed. Therefore, successful completion of the test would be mitigated by reading ability. However, it was felt that reading ability is an aspect of language proficiency and therefore the test could still be considered as a valid test of language proficiency.

There are no standardised tests for reading ability in South Africa therefore the *The Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) was used as it has norm tables that refer to students aged 6 to 12+ years. Even though the test had not been standardised for learners in Africa, Neale (1999:6) does indicate that the test can be used for readers of all ages, “especially those with a non-English background.”

Academic performance was regarded as the learners’ summative term mark average for 10 learning areas and the individual summative marks for Mathematics

and Social Sciences were regarded as indicative of performance in those learning areas. As noted previously, a single test cannot represent all the skills, outcomes and assessment standards of a particular learning area. Therefore using a variety of techniques can be regarded as fair and can give learners multiple opportunities to submit evidence. Summative assessment which makes use of multiple formative assessment sources may give a good indication of learners' underlying academic abilities better than a single test instrument.

- **Criterion-related validity**

It is important that tests are validated against some criterion. Tests should agree with an independent assessment of the candidate's ability. Thus, criterion validity refers to the extent to which tests used in a research study are comparable to other well established tests of the construct in question (Mackay & Gass, 2005). As noted in Chapter One, the items for the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) were accepted by a committee of subject experts after a specification table had been drawn up and a thorough study had been made of the suitability of the items used to test language proficiency. Since the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) met the criterion related validity measure, it was deemed as a valid measure of English language proficiency in this study.

In terms of criterion related validity, *the Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) shows significant correlations with other reading tests including the Holborn and Schonell reading tests (Neale, 1999). It was therefore considered a reliable test of reading ability.

At the time of the study there were no standardised tests of academic performance for Grade 7 learners that could be used to compare learners' summative academic average assessment marks. However, it can be generally said that learners who are weak in respect of their summative term marks in one year are generally found to be weak the following year.

- **Reliability**

As indicated in Chapter One, reliability refers to the consistency of measurement of a test. This means that an individual who takes a test should be able to get a similar score on two administrations of a test. A reliable test enables us to make comparisons on the basis of test results. As was also indicated in Chapter One, various statistical methods are available to determine the reliability of a test these include the split half, the Kuder-Richardson 20 and 21, and Cronbach's Alpha reliability model.

In the split half method a correlation coefficient is obtained by comparing the performance on half of a test with the performance on the other half. Kuder-Richardson 20 and 21 coefficients are calculated by using information consisting of the number of items on the test, the mean of the test and the standard deviations. Cronbach's Alpha reliability model is similar to Kuder-Richardson 20 and 21 but it is used when the number of possible answers are more than two (Mackay & Gass, 2005: 130). The closer a reliability coefficient is to 1 the more reliable the test will be. The closer it is to 0 the less reliable the test will be. The reliability coefficient (Kuder – Richardson 20) for the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) test was 0.89 and therefore satisfactory.

As noted in Chapter One, the consistency reliability coefficients (Kuder-Richardson –21) for the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) Form 2 for a test related to learners in Year 7 of schooling were satisfactory and are as follows:

Rate	0.95
Accuracy	0.96
Comprehension	0.89

Academic performance was not measured with regard to performance on a single test. While summative assessment that is the culmination of a variety of assessment techniques may be regarded as more valid, the more valid assessment becomes, the less reliable it becomes. Thus, summative assessments that are set

by teachers who may or may not have experience or qualifications in setting tests may be regarded as unreliable. In addition to this, assessment by teachers may be subjective as the teachers know the test takers personally and a measure of subjectivity can influence assessment. No test can be said to be completely objective, in every test there is some judgment or subjectivity involved in the hands of the marker. In a school situation tests can be set with the particular context and abilities of learners in mind and therefore teachers can teach for test and thus the test would not necessarily be a reliable indication of learner ability. Summative assessment that includes assessments carried out by peers, parents and teachers may have increased reliability. However, the use of a variety of assessment techniques that include homework, classwork, assignments, portfolios and exams implies that learners may get assistance from other sources such as parents and peers and therefore this type of assessment may not be reliable in that learners may not get similar scores on assessments that employ different techniques.

In view of the above, academic performance in terms of the average term mark over 10 learning areas and in terms of the summative marks in Mathematics and Social Sciences, may not be a reliable indicator of academic performance per se. However, judgments are made on these marks and progress to the following Grade is determined by means of these marks. Learners who perform well in one year generally perform well in the next and learners who are generally weaker in one year are generally weak the following year. The average summative assessment mark for performance in 10 learning areas and the summative assessment of performance in Mathematics and Social Sciences at the end of the term were therefore accepted as being indicative of learners' academic performance in this study.

The following table gives a summary of the research instruments that were used to measure each variable in the pilot study:

Variable	Research instrument
Academic Performance	Summative term mark (Aggregate of all 10 learning areas), Summative term mark in Mathematics, Summative term mark in Social Sciences.
Language Proficiency	1. The <i>Proficiency test English Second Language: Intermediate level</i> (Reinecke, 1992)
Reading Ability	1. Neale Analysis of Reading Ability (NARA III, Australian standardisation, 1999).

Table 3.2 Research instruments used to measure variables in the pilot and main study:

3.3.2 Research Population

The population that this research is concerned with are Grade 7 learners whose L1 is not English but who have learned their first literacy in English. These learners are in a school where English is the LOLT and where there is little or no support for their mother tongue. The school is based in the south of Johannesburg where I teach. These learners did not learn their first literacy in their mother tongue. They find themselves in a submersion context where they have to sink or swim. They are thrust into an English classroom in Grade 1 regardless of their proficiency in the language. The focus of this study is with Grade 7 the learners as they are in their final year of primary school and they are in the first year of their senior phase. They are also progressing to high school where they will be increasingly required to 'read to learn' and will increasingly need to be able to read expository texts. Their ages

range from 12-14 years. The learners are in a former Model C school which is well resourced and they have ready access to a school library. Textbooks and readers are also readily available to the learners. In the year that the pilot study was conducted the school population was as follows:

HOME LANGUAGE	NUMBER OF LEARNERS
English	439
isiZulu	277
Sesotho	140
isiXhosa	41
Xitsonga	26
Setswana	95
Tshivenda	24
Sepedi	26
Afrikaans	18
isiNdebele	1
SiSwati	3
Other	15
TOTAL	1105

As seen from the table above, 60.2% of the school population are English second language speakers from a variety of first language backgrounds.

The majority of teachers speak English but represent a variety of different home languages. Teachers' home languages (including principal and deputy principals) are as follows:

HOME LANGUAGE	NUMBER OF TEACHERS
English	17
Afrikaans	12
Sesotho	1
isiZulu	3
Tshivenda	1
TOTAL	34

The home languages of the 157 Grade 7 learners from which the sample for the pilot study was taken were as follows:

HOME LANGUAGE	GRADE 7 LEARNERS
English	65
isiXhosa	4
Sepedi	10
Sesotho	24
Setswana	18
Tshivenda	2
Xitsonga	3
isiZulu	25
SiSwati	0
Afrikaans	3

Other	3
Total	157

As seen above, 95 learners out of the 157 learners in Grade 7 were English second language speakers. Thus, 60.5 % of the total number learners were English second language speakers which is more or less indicative of the school population as a whole.

3.3.3. Sampling technique

Sampling involves selecting individual units to represent the population that the research seeks to find out more about and is therefore a subset of a population group. Researchers use samples because they do not have the time, money or resources to access the entire population. There are various sampling techniques available to researchers. Sampling techniques can be regarded as either probable or non-probable. In probability samples, each member of the population has a precise probability to be included in the sample. Probability sampling techniques include simple random samples, systematic random samples, stratified random samples and cluster samples (McMillan & Schumacher, 2010).

In non-probability samples the researcher may begin with a sample and go on to create a population that fits the sample (McMillan & Schumacher, 2010). In this type of sampling the researcher uses participants who are readily available.

A convenience sample was used for both the pilot and the main study. I am a teacher at the school sampled, it is situated in the south of Johannesburg where there are a number of English second language learners who come from varying linguistic backgrounds. They learn in a language submersion context. There were four classes of Grade 7 learners with between 38 and 40 learners in each class. The participants were easily accessible and it was possible to conduct the tests practically as I was able to meet them outside of teaching times, such as immediately after school or during break times. While the participants were not

randomly selected they do conform to the characteristics of the population that is under scrutiny.

For the purposes of the pilot study, one class consisting of both boys and girls was selected. The class consisted of both first language and second language learners as to be consistent with the population being studied. Second language learners were approached and letters were sent home with the second language learner samples within the class. Those that gave permission to participate were used in the pilot study. The class selected for the pilot study consisted of 39 learners. Of the 39 learners, 16 were first language learners and 23 were second language learners. Therefore 41% of the learners in the class were first language speakers, while 59% were second language speakers. This is also coincidentally indicative of the composition of the school population as a whole. Of the 23 second language learners selected 18 returned permission slips from parents or guardians to participate in the study. Of the 18 learners selected, 13 were girls and 5 were boys.

The participants' home languages are as follows:

IsiZulu	2
IsiXhosa	3
Setswana	3
Sesotho	5
Sepedi	3
Xitsonga	1
Portuguese	1
Total	18

For the main study, the sample was extended to a wider range of learners. The main study was conducted a year after the pilot study. For the main study, the sample of Grade 7 English second language learners extended to all the Grade 7 English

second language speakers within the group and not just one class. Letters inviting learners to participate in the study were sent to all the English second language speakers in the group and 36 returned consent forms.

The language population of the school in the year that the main study was conducted was very similar to the previous year when the pilot study was conducted and was as follows:

English	415
isiZulu	286
Sesotho	144
isiXhosa	43
Xitsonga	27
Setswana	89
Tshivenda	27
Sepedi	22
Afrikaans	24
isiNdebele	1
siSwati	1
Other	13
TOTAL	1092

In the year that the main study was conducted 677 learners in the school were English second language speakers which constituted 61.9% of the school's population. The composition of the teaching staff stayed static.

The language population of the Grade 7 group was as follows:

English	69
isiXhosa	6
Sepedi	7
Sesotho	11
Setswana	10
Tshivenda	6
Xitsonga	5
isiZulu	41
siSwati	0
Afrikaans	1
Other	3
Total	158

As seen from the table above, 89 learners out of the 158 learners in Grade 7 were English second language speakers. Thus, 56.3% of the total number of learners in the grade were English second language speakers.

3.3.4 Data collection

The details of the study were explained to the learners in class and consent forms (See Appendix 2) explaining the details of the study and requesting consent were given to all 89 of the second language learners in grade 7.

The language population of the 36 learners who returned consent forms and who participated in the study was as follows:

isiZulu	13
isiXhosa	3

Setswana	5
Sesotho	6
Sepedi	1
Xitsonga	5
Tshivenda	3
Total	36

The learners wrote the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) in a group. Their results in terms of stanines were recorded on a class list. Thereafter appointments were made for the learners to complete the *Neale Analysis of Reading Ability* (NARA III, Australian standardisation, 1999) individually with the researcher after school. The NARA involves learners reading aloud individually to the researcher. There are 6 passages which the reader can read. There is a limit of 16 errors per passage. Errors and the time taken to read the passage are recorded and then the learners are asked questions to test recall and comprehension. Testing is stopped if the reader exceeds the limit of errors for each passage. The test takes approximately 20-25 minutes to complete. Recordings were also made of the tests as is recommended, so that the researcher is able to go back and check results after the test has been completed by the participant. The results of these tests were then recorded on class lists in terms of stanines.

3.3.5 Data analysis

In both the pilot study and the main study the learners' term mark for the 10 learning areas was used to rank learners by means of the 9 point stanine interval scale outlined in Chapter One.

In addition to this, in both the pilot study and the main study, the learners were divided into three groups with respect to academic performance as follows:

Stanines	Academic group	Pilot study – number of students	Main study – number of students
Stanine 1-3	Low	<i>n</i> = 5	<i>n</i> = 7
Stanine 4-5	Average	<i>n</i> = 7	<i>n</i> = 14
Stanine 6-9	High	<i>n</i> = 6	<i>n</i> = 15

Table 3.3 Academic groups distinguished with respect to academic performance in the pilot study and the main study.

This enabled the average percentage (%) that each group achieved in each test to be compared by means of a bar graph. Parents provided permission for the learners' academic results to be used for the purpose of the study (see Appendix 2).

Learners' academic performance was also assessed in terms of Mathematics and Social Sciences. It was felt that in Mathematics reading ability would play less of a role than language proficiency. Learners would employ more logico-deductive skills in Mathematics and would rely more on language proficiency in this subject than on their reading ability. It was believed that the converse would apply in Social Sciences as learners rely on a textbook in this subject and therefore reading ability would possibly play a larger role in their academic performance. The results of the tests of language proficiency and reading ability were also correlated with the learners' performance in Mathematics and Social Sciences. It was felt that at Grade 7 level learners would rely more heavily on reading in the Social Sciences learning area and less so in Mathematics. This relationship was investigated to determine whether reading had a significant relationship to academic achievement in subjects that required large amounts of reading.

Language proficiency was measured in terms of performance on the *Proficiency test English Second Language: Intermediate level* (Reinecke 1992). The test was administered to all learners whose parents granted permission for them to participate in the study as outlined previously. The test was administered outside of

teaching time as per the requirements of the Gauteng Education Department. Learners were given 40 minutes to complete the test. The results of this test were individually correlated with the learner's academic performance.

Once the data was gathered it was analysed in terms of quantitative statistical procedures. Firstly, a one-way ANOVA test was conducted to determine whether the groups were indeed statistically different in terms of their academic performance. Homogeneity of variance was also tested by means of the Levene's test. Further to that the null hypothesis with respect to the relationship between academic results and the results on the reading and language proficiency tests was tested by means of the Pearson product-moment correlation. This was calculated using SPSS 22 software. The statistical significance of the relationship was also considered by taking into account the p -level or level of probability. A p -value of less than .05 was considered to be statistically significant. This method of analysis was employed for both the pilot study and the main study.

3.4 Limitations

This study does not aim at causality, it is an associational study. Therefore, if for example it is found that there is a significant correlation between language ability and academic ability we cannot conclude that proficiency in language causes academic performance to be increased.

Convenience sampling also has its limitations. It may not be possible to generalise findings to the entire population. The students in the school may come from a fairly middle class socio-economic area and thus it would not be possible interpret the results as valid for the students in lower socio-economic areas. However, it is still possible to accept the results as valid for children similar to those that are under study.

The research instruments also have limitations. The *Proficiency test English Second Language: Intermediate level* test is limited in that it may be outdated. However, as stated previously it has been used effectively in studies of other researchers such as Manyike (2007) and can be considered indicative of language proficiency. The

Neale Analysis of Reading Ability (NARA III, Australian standardisation, 1999) has not been standardised in terms of learners in Africa but is considered indicative of reading ability in second language learners. Nevertheless, in terms of studies such as the PRILS (2006) study, the literacy levels of South African students are being compared to those of learners from around the world and therefore performance on this test would give an indication of the expected reading ability of learners at this level in English LOLT environments around the world.

There was also a fairly low response to the request for learners to participate in this study. Unfortunately, the study had to be conducted outside of teaching time and during after school hours and this possibly resulted in the fairly low response to the invitation to participate. Transport and extra-mural commitments may have influenced a learner's decision to participate. However, the data collected was sufficient for statistical analysis.

3.5 Ethical considerations

Most research deals with human beings and therefore it is important to be cognisant of ethical responsibilities while doing research. Research ethics involve what is considered to be moral and proper when engaging in research. McMillan and Schumacher (2010) outline some important principles to consider when conducting research. Firstly, they indicate that there must be no deception involved and that the researcher must give full disclosure to the participants. Secondly, participation in the study must be voluntary. Participants should not feel that they are under duress when taking part in the research. It is also imperative that informed consent is obtained where subjects agree to participate in a study and that they know exactly what the study is about. The privacy and confidentiality of participants also needs to be maintained.

Before this study was conducted written permission was obtained from the Department of Education. The Department of Education stipulated that the research must only be conducted during the second and third terms. It was also stipulated that the study must be conducted outside of teaching time. Both these stipulations were complied with in respect of both the pilot study and the main study. Please

see Appendix 1 for a copy of the consent letter from the Gauteng Department of Education.

When studies of minors are being conducted parental or legal guardian approval is required. Consent forms were sent home to all the selected participants in both the pilot and main study. Please see Appendix 2 for a copy of the consent letter that was sent out to parents. The consent letter assured parents of confidentiality and also indicated what the aims of the study were. Furthermore, it enabled parents to provide permission for the learners to take the tests and for their results to be used in the study. Permission was also obtained for the learners' term marks or academic results to be used in the study. Confidentiality was also ensured. Both The pilot study and the main study were executed using rigorous quantitative methods to guard against any bias in the findings as the learners came from the Grade 7 classes that I teach. Ethical clearance was also obtained from the University of South Africa.

6. Conclusion

This chapter locates both the aims of the study and the review of the literature in the research method used to investigate the relationship between the variables of language proficiency, reading ability and academic performance. The aim of the study is to determine whether language proficiency or reading ability is the most robustly correlated to academic performance. A null hypothesis was assumed at the beginning of the study where it was stated that there was no relationship between the variables under scrutiny. Evidence was sought in order to reject that hypothesis. A pilot study using the same methods of data collection and analysis was used the year before the main study. In the next chapter, the findings of both the pilot study and the main research study will be presented and analysed in terms of their meaning and implications.

Chapter Four

FINDINGS

4.1 Introduction

Chapter 3 discussed the research method and design with respect to the aims and objectives of the study. The first goal of this chapter is to examine the relationship between English language proficiency and academic performance, as well as the relationship between reading ability and academic performance amongst Grade 7 ESL learners in a submersion context. The second goal of the chapter is to examine the relationship of the variables of English language proficiency and English reading ability to academic performance in Mathematics and Social Sciences. The third goal of the chapter is to examine the relationship between English reading ability and academic performance in terms of English decoding ability and English reading comprehension ability. Finally, the fourth goal of the chapter is to examine whether English reading ability or English language proficiency bears the more significance in the relationship with academic performance.

The purpose of the pilot study was to determine how big the main study was going to be. The main study served a confirmatory purpose - to further test and consolidate the findings of the pilot study. Therefore the findings of both the pilot and the main study have been included in this chapter.

The findings of both the pilot and the main study are outlined with respect to the above mentioned goals.

4.2 Academic Performance

The construct of academic performance was a combination of results in the following ten learning areas: English Home Language, Afrikaans First Additional Language, Zulu Second Additional Language, Mathematics, Natural Sciences, Technology, Social Sciences, Economic Management Science, Arts and Culture and Life Orientation. In both the pilot and the main study, the sample was divided into three groups according to academic performance. Learners' academic performance was

viewed in terms of their summative term assessment at the end of the term. The learners' marks were then ranked according to a stanine scale.

4.2.1 What is the academic performance of Grade 7 ESL learners in submersion contexts?

In addition to the summative term assessment mark, the learners' Mathematics and Social Sciences marks were also viewed as indicative of their academic performance. In Chapter 3 it was noted that these two subjects were selected because they both require different levels of reading ability for academic success. The results of the learners in both the pilot study ($n=18$) and the main study ($n=36$) are as follows:

No.	Term summative assessment mark (Average of 9 learning areas (%))	Stanine	Mathematics summative term mark (%)	Stanine	Social Science summative term mark (%)	Stanine
1.	73	6	76	6	72	6
2.	71	6	70	6	67	5
3.	73	6	62	5	72	6
4.	73	6	59	5	75	6
5.	70	6	62	5	69	5
6.	85	9	82	8	83	8
7.	59	4	41	3	53	3
8.	64	4	48	4	61	4

No.	Term summative assessment mark (Average of 9 learning areas (%))	Stanine	Mathematics summative term mark (%)	Stanine	Social Science summative term mark (%)	Stanine
9.	62	4	46	4	55	3
10.	65	5	58	5	61	4
11.	60	4	44	3	63	4
12.	59	4	60	5	58	4
13.	60	4	43	3	62	4
14.	55	3	49	4	60	4
15.	53	3	46	4	54	3
16.	47	3	43	3	42	1
17.	53	3	30	1	54	3
18.	50	2	32	2	51	2
Mean %	62	4	53	4	52.2	3

Table 4.1 Pilot Study (n=18) Summative assessment marks for 10 learning areas, summative assessment marks for Mathematics and Social Sciences.

Table 4.1 indicates that the overall mean of the summative assessment marks for all 10 learning areas is 62% which is an average result, while the mean performance in Mathematics and Social Sciences is significantly lower at 53% and 52.2% respectively. There was only one participant who ranked in stanine 9 and one who

ranked in stanine 2. The above results indicate that the learners in the sample reflect a range of learners including those who are fairly high achievers as well as those who are relatively low achievers.

No.	Term summative assessment mark (Average of 9 learning areas (%))	Stanine	Mathematics summative term mark (%)	Stanine	Social Science summative term mark (%)	Stanine
1.	84	9	89	8	85	8
2.	81	8	82	8	83	7
3.	81	8	80	7	83	7
4.	79	8	80	7	83	7
5.	75	7	76	7	79	7
6.	75	7	74	7	80	7
7.	73	6	73	6	72	6
8.	74	6	73	6	73	6
9.	78	7	69	6	80	7
10.	76	7	80	7	80	7
11.	68	6	64	6	74	6
12.	71	6	63	5	73	6
13.	69	6	62	5	72	6

No.	Term summative assessment mark (Average of 9 learning areas (%))	Stanine	Mathematics summative term mark (%)	Stanine	Social Science summative term mark (%)	Stanine
14.	70	6	58	5	72	6
15.	67	6	49	4	70	6
16.	65	5	64	6	68	5
17.	59	4	62	5	55	3
18.	61	5	62	5	63	5
19.	63	5	62	5	63	5
20.	59	4	57	5	64	5
21.	62	5	52	4	60	4
22.	60	4	52	4	62	4
23.	60	4	52	4	65	5
24.	58	4	51	4	51	2
25.	57	4	50	4	66	5
26.	62	5	49	4	64	5
27.	63	5	49	4	59	4
28.	62	5	47	3	62	4
29.	58	4	44	3	59	4

No.	Term summative assessment mark (Average of 9 learning areas (%))	Stanine	Mathematics summative term mark (%)	Stanine	Social Science summative term mark (%)	Stanine
30.	48	1	42	3	45	2
31.	50	2	41	2	52	3
32.	50	2	39	2	46	0
33.	51	3	39	2	47	2
34.	54	3	38	2	44	1
35.	56	3	38	2	59	4
36.	52	3	32	1	52	3
Average %	65.35	5	58.96	5	65.8	5

Table 4.2 Main Study (n=36) Summative assessment marks for 10 learning areas, summative assessment marks for Mathematics and Social Sciences.

Table 4.2 indicates that the average of all the summative assessment marks for the 10 learning areas is 65.35% which is an average result while the average performance in Mathematics is significantly lower at 58.96% and the average performance in Social Sciences is fairly average at 65.8%. There was one participant who ranked in stanine 9 and 3, who ranked in stanine 8 while there was only one participant who ranked in stanine 1 and 2, who ranked in stanine 2. The above results indicate that the learners in the sample reflect a range of learners

including those who are fairly high achievers as well as those who are relatively low achievers.

Therefore the academic results of the learners who formed part of the sample for both the pilot and main studies are spread from academically weak to academically strong, with the majority of learners achieving in the average range ranking in stanine 4 or 5. Their academic marks were used to divide the sample into three groups. Learners who ranked in stanine 1-3 were placed in the low academic performance group, learners who ranked in stanine 4-5 were placed in the average performance group while those who ranked in stanine 6-9 were placed in the high performance group. The learners were therefore grouped as follows:

		Pilot study (n=18)	Main study (n=35)
3	Low (Stanine 1-3)	n=5	n=7
2	Average (Stanine 4-5)	n=7	n=14
1	High (Stanine 6-9)	n=6	n=15

Table 4.3 Grouping of learners in the sample for the pilot study (n=18) and main study (n=36)

The mean performance of the groups in terms of the summative term mark is illustrated by Figures 4.1 and 4.2.

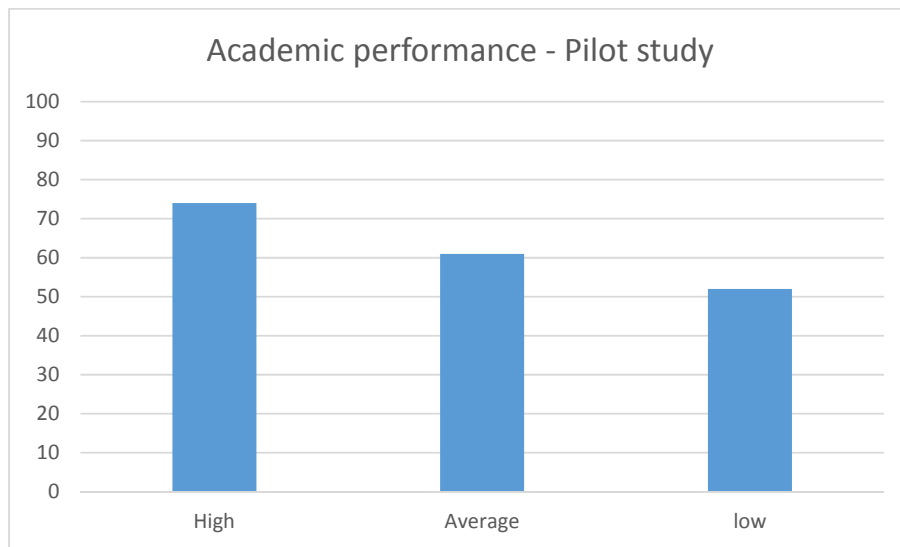


Figure 4.1 Average (%) performance of the groups in the pilot study (n=18)

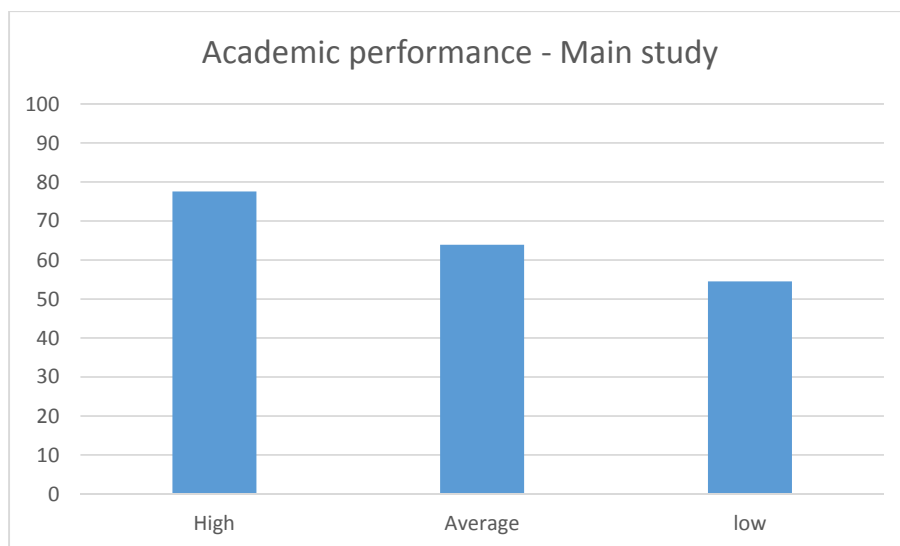


Figure 4.2 Average (%) performance of the groups in the main study (n=36)

Figures 4.1 and 4.2 indicate that the three groups differed in terms of their average performance on the final terms' summative mark. In order to verify that the groups do indeed differ in terms of academic performance, a one-way ANOVA was conducted with respect to the groups' academic performance. Homogeneity of variance (Levene's test) was guaranteed for each of the groups in the pilot study with

respect to academic performance (Levene (2, 15) = .386, $p > .05$). The analysis yielded a significant effect, $F(2, 15) = 24.651$, $p = .000$.

Homogeneity of variance (Levene's test) was also guaranteed for each of the groups in the main study with respect to academic performance (Levene (2, 33) = .114, $p > .05$). The analysis yielded a significant effect, $F(2, 33) = 76.096$, $p = .000$. Therefore the three groups in both the pilot study and the main study can be regarded as statistically different with respect to academic performance.

4.3 English language proficiency and academic performance

In Chapter 3 it was indicated that English language proficiency would be measured in terms of the learners' performance on the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992). In terms of achieving the first goal of the study the relationship between learners' performance and academic performance would be examined. The following main research question was posed:

- Is there a significant relationship between English language proficiency and academic performance amongst Grade 7 learners in a submersion context?

In order to answer the above question it is important to establish what the English language proficiency of Grade 7 ESL learners in submersion contexts is. The following research sub question was posed:

- What is the English language proficiency of Grade 7 ESL learners in submersion contexts?

The *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) comprises 40 questions. The raw score achieved on the test is then expressed in terms of a stanine scale. The learners' performance on the test was as follows:

No.	Raw score /40	Stanine	Academic group
1.	25	6	High
2.	28	6	High

3.	27	6	High
4.	25	6	High
5.	30	7	High
6.	32	7	High
7.	21	5	Average
8.	27	6	Average
9.	11	3	Average
10.	18	4	Average
11.	10	2	Average
12.	20	5	Average
13.	23	5	Average
14.	21	5	Low
15.	28	6	Low
16.	19	5	Low
17.	18	5	Low
18.	15	4	Low
Mean /40	22.2	5	Average
Average %	55%		

Table 4.4 Participants' achievement in the Proficiency test English Second Language: Intermediate level (Reinecke, 1992) in the pilot study (n=18)

Table 4.4 indicates that there was an even spread of the achievement of the participants in the test. There were no excessively high scores and there were no learners who ranked in stanines 8 or 9, also there were few very low scores and only one learner was ranked in stanine 2 in the pilot study. The mean performance of the learners on the test was 22.2 which would rank as a stanine 5 which in terms of the performance descriptors of the test is average. Therefore, English language proficiency of the group as a whole is average.

No.	Raw score /40	Stanine	Academic group
1.	28	6	High
2.	23	5	High
3.	24	6	High
4.	29	7	High
5.	25	6	High
6.	27	6	High
7.	29	7	High
8.	32	7	High
9.	24	6	High
10.	31	7	High
11.	27	6	High
12.	31	7	High
13.	15	7	High
14.	29	7	High
15.	27	6	High

16.	15	4	Average
17.	28	6	Average
18.	16	6	Average
19.	20	5	Average
20.	20	5	Average
21.	16	4	Average
22.	12	3	Average
23.	18	4	Average
24.	34	8	Average
25.	22	8	Average
26.	14	4	Average
27.	17	4	Average
28.	19	5	Average
29.	5	1	Average
30.	21	5	Low
31.	16	4	Low
32.	6	1	Low
33.	23	5	Low
34.	13	6	Low
35.	24	6	Low
36.	22	5	Low

Mean /40	20.96	5	Average
Average %	52.4%		

Table 4.5 Participants' achievement in the Proficiency test English Second Language: Intermediate level (Reinecke, 1992) in the main study (n=36)

Table 4.5 indicates that there was an even spread of the achievement of the participants in the English language proficiency test in the main study. There were no excessively high scores. There were no learners who ranked in stanine 9, while only 2 ranked in stanine 8 in the main study, also there were few very low scores with only two learners being ranked in stanine 1 in the main study. The mean performance on the test was 20.96 which ranks in stanine 5 and is therefore considered average in terms of the performance descriptors of the test. Therefore the English language proficiency of the groups as a whole can be considered average.

A one-way ANOVA test was conducted on the results of this test to determine whether the three outlined groups showed a significant difference in the mean achievement in the test. The null hypothesis assumed that the groups would not differ significantly in terms of their performance on the English language proficiency test.

The results indicated that there was statistical difference between the three groups in the pilot study on the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992). Homogeneity of variance (Levene's test) was guaranteed for each of the groups with respect to performance on the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992), (Levene (2, 15) = .058, $p > .05$), thereby rejecting the null hypothesis. The analysis yielded a significant effect, $F(2, 15) = 6.980$, $p = .007$. Therefore the three groups in the pilot study can be regarded as statistically different with respect to their performance on the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992).

Homogeneity of variance (Levene's test) was also guaranteed for each of the groups in the main study with respect to performance on the *Proficiency test English Second*

Language: Intermediate level (Reinecke, 1992), ($F(2, 33) = .326, p > .05$), thereby also rejecting the null hypothesis. The analysis yielded a significant effect, $F(2, 33) = 9.452, p = .001$. Therefore the three groups in the main study can also be regarded as statistically different with respect to performance on the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992). There was no large variance of means within each of the groups and each group performed significantly different in terms of mean performance on the test. This would suggest that English language proficiency of the participants is related to academic performance and enables a Pearson product-moment correlation to be calculated.

Figure 4.3 indicates that there is a relationship between the performance on an English language proficiency test and academic performance in the pilot study. Those who scored highly on the test also achieved well academically.

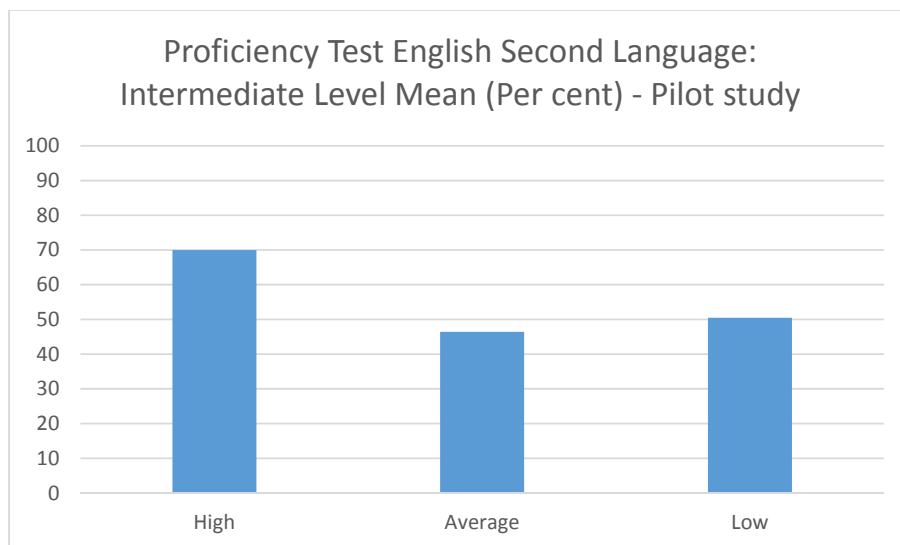


Figure 4.3 Average (%) performance of each of the three groups in the pilot study (n=18) on the Proficiency test English Second Language: Intermediate level (Reinecke, 1992)

In addition to the above, a Pearson product-moment correlation was computed between the test results and academic performance in the pilot study. The results were as follows:

There was a significant correlation between the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) and academic performance [$r=0.559$, $n=18$, $p<0.05$].

Figure 4.4 below confirms that in the main study there also appeared to be a relationship between academic performance and performance on the English language proficiency test. Those that achieved well academically, scored well on the English language proficiency test while those that achieved low or average marks academically, did not achieve as well as their counterparts on the English language proficiency test.

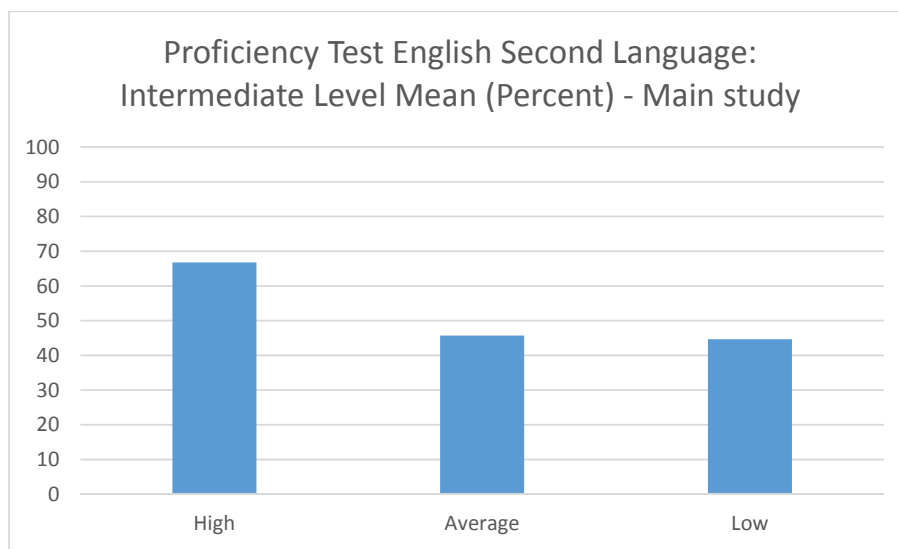


Figure 4.4 Average (%) performance of each of the three groups in the main study (n=36) on the Proficiency test English Second Language: Intermediate level (Reinecke, 1992)

There was also a significant correlation between the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) and academic performance [$r=0.463$, $n=36$, $p<0.01$] in the main study.

Therefore, in answer to the question posed with respect to the relationship between English language ability and academic performance it can be concluded that there is indeed a significant relationship between academic performance and English language proficiency. The results mean that those who performed better on the

English language proficiency test performed better academically and vice versa. It is therefore imperative that learners are supported with respect to language ability as it is vital to academic success.

The second goal of the study was to examine the relationship of English language proficiency to academic performance in Mathematics and Social Sciences. The following research question was posed:

- Is there a significant relationship between English language proficiency and academic performance in Mathematics and Social Sciences of Grade 7 ESL learners in submersion contexts:

In order to answer the above question it is important to establish what the academic performance of Grade 7 ESL learners in Mathematics and Social Sciences in submersion contexts is. The following research sub question was posed:

- What is the academic performance of Grade 7 ESL learners in submersion contexts in Mathematics and Social Sciences?

English language proficiency was then correlated with academic performance in Mathematics and Social Sciences. The premise was that Mathematics requires the least reading in terms of reading to learn at Grade 7 level and learners may rely heavily on teacher talk in order to learn. Learning in the Social Sciences may depend more on the textbook and therefore reading ability would possibly be more significant in that learners have to read more in order to learn.

4.3.1 English language proficiency and Mathematics

The participants achieved the following results in Mathematics at the end of the term.

No.	Mathematics mark (%)	Stanine	Academic group
1.	76	6	High
2.	70	6	High

3.	62	5	High
4.	59	5	High
5.	62	5	High
6.	82	8	High
7.	41	3	Average
8.	48	4	Average
9.	46	3	Average
10.	58	5	Average
11.	44	3	Average
12.	60	4	Average
13.	43	3	Average
14.	49	4	Low
15.	46	3	Low
16.	42	1	Low
17.	54	3	Low
18.	51	2	Low
Average %	53	3	Low

Table 4.6 Performance in Mathematics of the three groups in the pilot Study (n=18)

Table 4.6 indicates that overall, the average performance of learners in the pilot study in Mathematics was low. It appears that those in the high achieving academic group generally achieve higher marks in Mathematics. A Pearson product-moment

correlation was computed between the language proficiency test and academic performance in Mathematics.

There was a significant correlation between the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) and performance in Mathematics [$r=0.560$, $n=18$, $p<0.05$] in the pilot study.

No.	Mathematics mark (%)	Stanine	Academic group
1.	89	8	High
2.	82	8	High
3.	80	7	High
4.	80	7	High
5.	76	7	High
6.	74	7	High
7.	73	6	High
8.	73	6	High
9.	69	6	High
10.	80	7	High
11.	64	6	High
12.	63	5	High
13.	62	5	High
14.	58	5	High
15.	49	4	High

No.	Mathematics mark (%)	Stanine	Academic group
16.	64	6	Average
17.	62	5	Average
18.	62	5	Average
19.	62	5	Average
20.	57	5	Average
21.	52	4	Average
22.	52	4	Average
23.	52	4	Average
24.	51	4	Average
25.	50	4	Average
26.	49	4	Average
27.	49	4	Average
28.	47	3	Average
29.	44	3	Average
30.	42	3	Low
31.	41	2	Low
32.	39	2	Low
33.	39	2	Low
34.	38	2	Low

No.	Mathematics mark (%)	Stanine	Academic group
35.	38	2	Low
36.	32	1	Low
Average %	58.96	5	Average

Table 4.7 Performance in Mathematics of the three groups in the main study (n=36)

The average performance in Mathematics for the three groups in the main study is 58.96% which would rank in stanine 5, this indicates that the participants' performance in Mathematics is average. The Mathematics results for the main study also indicate that those in the high performing academic group generally score higher marks for Mathematics than those in the average and low performing groups. There was a significant correlation between the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) and performance in Mathematics [$r=0.495$, $n=36$, $p<0.05$] in the main study.

In both the pilot and the main study there was a significant relationship between Mathematics and English language proficiency. This means that those who performed well in Mathematics also performed well in English language proficiency and vice versa. The implication is that in Mathematics, learners rely on 'teacher talk' or classroom discourse for learning and thus it is clear that language proficiency would play a significant role in achievement in Mathematics. In addition to this, the requirements of Mathematical problems may be context reduced and thus language proficiency would play a significant role in Mathematical achievement.

4.3.2 English language proficiency and Social Sciences

The participants achieved the following results in the Social Sciences:

No.	Social Sciences (%)	Stanine	Academic group
1.	72	6	High
2.	67	5	High
3.	72	6	High
4.	75	6	High
5.	69	5	High
6.	83	8	High
7.	53	3	Average
8.	61	4	Average
9.	55	3	Average
10.	61	4	Average
11.	63	4	Average
12.	58	4	Average
13.	62	4	Average
14.	60	4	Low
15.	54	3	Low
16.	42	1	Low
17.	54	3	Low

No.	Social Sciences (%)	Stanine	Academic group
18.	51	2	Low
Average %	61.77	4	Average

Table 4.8 Performance of the three groups in Social Sciences in the pilot study (n=18)

Table 4.8 indicates that the average performance of participants in the pilot study in Social Sciences is 61.77% which is average.

A Pearson product-moment correlation was computed between the test results and the academic performance in Social Sciences. There was a significant correlation between the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) and performance in Social Sciences [$r=0.563$, $n=18$, $p<0.05$] in the pilot study.

No.	Social Sciences (%)	Stanine	Academic group
1.	85	8	High
2.	83	7	High
3.	83	7	High
4.	73	7	High
5.	79	7	High
6.	80	7	High
7.	72	6	High
8.	73	6	High

No.	Social Sciences (%)	Stanine	Academic group
9.	80	7	High
10.	80	7	High
11.	74	6	High
12.	73	6	High
13.	72	6	High
14.	72	6	High
15.	70	6	High
16.	68	5	Average
17.	55	3	Average
18.	63	5	Average
19.	63	5	Average
20.	64	5	Average
21.	60	4	Average
22.	62	4	Average
23.	65	5	Average
24.	51	2	Average
25.	66	5	Average
26.	64	5	Average
27.	59	4	Average

No.	Social Sciences (%)	Stanine	Academic group
28.	62	4	Average
29.	59	4	Average
30.	45	2	Low
31.	52	3	Low
32.	46	2	Low
33.	47	2	Low
34.	44	1	Low
35.	59	4	Low
36.	52	3	Low
Average %	65.8	5	Average

Table 4.9 Performance of the three groups in Social Sciences in the main study (n=36)

Table 4.9 indicates that the mean performance of participants in Social Sciences in the main study is 65.8% which is average.

A Pearson product-moment correlation was computed between the test results and academic performance in Social Sciences. There was a significant correlation between the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) and performance in Social Sciences [$r=0.461$, $n=36$, $p<0.01$] for the main the man study. This means that those who performed better in the language proficiency test, performed better in Social Sciences. The implication here is that learners rely on classroom discourse and teacher talk in the Social Sciences

learning area and thus English Language Proficiency is closely related to academic performance in Social Sciences.

The results can be summarised as follows:

	<i>Proficiency test English Second Language: Intermediate level (Reinecke, 1992) Pilot Study n=18</i>	<i>Proficiency test English Second Language: Intermediate level (Reinecke, 1992) Main Study n=36</i>
Academic performance	.559*	.463**
Mathematics	.560*	.495**
Social Sciences	.563*	.461**

*Correlation is significant at the 0.05 level (2 tailed)

**Correlation is significant at the 0.01 level (2-tailed)

Table 4.10 Pearson product-moment correlations between overall academic performance, performance in Mathematics and Social Sciences and performance on the Proficiency test English Second Language: Intermediate level (Reinecke, 1992).

As can be seen from the above there are significant correlations between English language proficiency and academic performance in both the pilot and the main study. There are also significant correlations between English language proficiency and Mathematics and between English language proficiency and Social Sciences. The results mean that those who performed better on the English language proficiency test perform better in the Social Sciences and vice versa. The implication is that in the primary school context learners rely extensively on classroom discourse for learning and are teacher dependent and thus English language proficiency would be necessary for academic success.

4.4 English reading ability and academic performance

As noted above the third objective of the study was to investigate the relationship between English reading ability and academic performance. Reading ability is seen as the product of comprehension ability and decoding ability. Therefore the first aspect investigated was the relationship of English reading comprehension ability to academic performance. After that the relationship of English decoding ability to academic performance was investigated.

4.4.1 English reading comprehension ability and academic performance.

The null hypothesis was assumed where it was stated that there was no significant relationship between English reading comprehension ability and academic performance amongst Grade 7 learners in a submersion context. The following main research question was posed:

- Is there a significant relationship between English reading comprehension ability and academic performance amongst Grade 7 learners in a submersion context?

In order to investigate the above question it is necessary to know what the English reading comprehension of Grade 7 ESL learners in submersion contexts is. Therefore, the following research sub question was posed:

- What is the English reading comprehension ability of Grade 7 ESL learners in submersion contexts?

English reading comprehension ability was defined as performance on the comprehension component of *the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)*. This test has decoding, a comprehension and reading rate components.

No.	Raw score /43	Stanine	Academic group
1.	23	3	High
2.	27	5	High
3.	27	4	High
4.	9	3	High
5.	21	3	High
6.	30	5	High
7.	21	3	Average
8.	25	4	Average
9.	17	2	Average
10.	13	1	Average
11.	16	2	Average
12.	24	4	Average
13.	23	3	Average
14.	17	2	Low
15.	29	4	Low
16.	17	2	Low
17.	19	3	Low
18.	23	3	Low
Mean	21.23	3	Low

No.	Raw score /43	Stanine	Academic group
Average %	49.37		

Table 4.11 Learner performance on the comprehension component of the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) in the pilot study (n=18)

Table 4.11 indicates that the English reading comprehension ability of Grade 7 ESL learners in submersion contexts is generally low. No learners ranked above stanine 5. The mean performance on the reading test was 21.23 which ranked in stanine 3 of the test, which is considered low. Even learners who perform well academically did not score well in the English reading comprehension test. It would appear that the learners in high performing group did slightly better than those in the low and average groups. As a whole, Grade 7 ESL learners in submersion contexts have low English reading comprehension. Since the overall reading performance of Grade 7 students is low, teachers need to attend to the learners' English language skills because the learners appear not to understand what they read. Although language is just one aspect of reading, these results indicate that it is important.

The null hypothesis was assumed where it was stated that the groups would not differ significantly in terms of their performance on the reading test. An ANOVA test conducted on the three groups in the pilot study for the performance on the above test, while guaranteeing homogeneity of variance (Levene (2, 33) =0.958, $p > 0.05$) for each of the three groups, the results showed no significance between groups $F(2, 15) = 1.741, p = .209$ in the pilot study.

A Pearson product-moment correlation was computed to determine if there was a significant correlation between performance on this test and academic performance. There was a significant correlation between reading comprehension tested by means of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) and academic performance [$r = 0.481, n = 18, p < 0.05$].

No.	Raw score /43	Stanine	Academic group
1.	26	4	High
2.	19	3	High
3.	24	4	High
4.	28	4	High
5.	26	4	High
6.	22	3	High
7.	19	3	High
8.	26	4	High
9.	23	3	High
10.	24	4	High
11.	24	4	High
12.	26	4	High
13.	17	2	High
14.	22	3	High
15.	16	2	High
16.	16	2	Average
17.	33	5	Average
18.	14	1	Average
19.	10	1	Average
20.	17	2	Average

No.	Raw score /43	Stanine	Academic group
21.	17	2	Average
22.	14	1	Average
23.	19	2	Average
24.	19	3	Average
25.	18	2	Average
26.	17	2	Average
27.	18	2	Average
28.	24	4	Average
29.	14	1	Average
30.	19	3	Low
31.	15	2	Low
32.	15	2	Low
33.	29	5	Low
34.	15	2	Low
35.	13	1	Low
36.	17	2	Low
Mean	19.38	3	Low
Average %	45.06		

Table 4.12 Learner performance on the comprehension component of the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) in the main study (n=36)

Table 4.12 indicates that in the main study, the English reading comprehension of participants was also low. The mean performance of learners on the English reading comprehension test was 19.38 which would rank in stanine 3 which is considered low. There were no learners who achieved in stanines 6-9. This once again confirms what was suggested previously, that although language is just one aspect of reading ability, teachers need to attend to the learners' English language skills as these are important because learners do not understand what they have read.

The null hypothesis was assumed where it was stated that the groups would not differ significantly in terms of their performance on the reading test. In the main study an ANOVA test was conducted on the three groups and homogeneity of variance was guaranteed for the three groups in terms of their performance in the comprehension component of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) (Levene (2, 33)=0.662, $p > 0.05$). The analysis yielded a significant effect $F(2,33)=5.744$, $p=.007$. Therefore the null hypothesis was rejected.

A Pearson product-moment correlation indicated that there was a significant correlation between reading comprehension tested by the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) and academic performance [$r=0.404$, $n=36$, $p<0.05$] in the main study.

From the above results it can be concluded that there is a significant relationship between reading ability in terms of English reading comprehension and academic performance. At Grade 7 level learners, are developing an increasing need to 'read to learn' and thus it is evident that reading comprehension is emerging as necessary for academic success.

The following figures indicate that there is a relationship between English reading ability and academic performance:

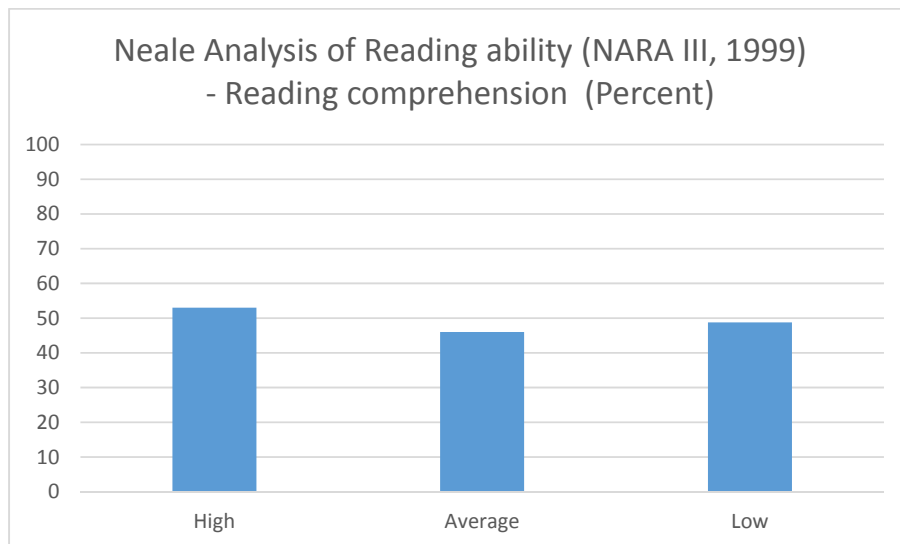


Figure 4.5 Average (%) performance of each of the three groups in the pilot study (n=18) on the reading comprehension aspect of the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)

Figure 4.5 indicates that for the pilot study, the high performing academic group performed slightly better than the average and low academic groups on the English reading comprehension test.

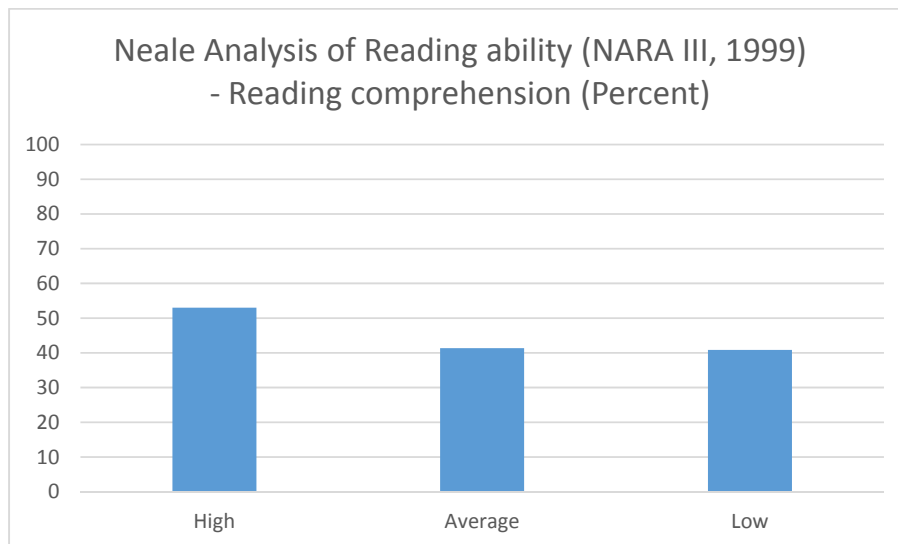


Figure 4.6 Average (%) performance of each of the three groups in the main study (n=36) on the reading comprehension aspect of the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)

Figure 4.6 indicates that for the main study the high performing academic group performed better than the average and low performing academic groups.

4.4.2. English reading comprehension and Mathematics

Tables 4.6 and 4.7 above indicate the results of the participants in Mathematics at the end of the term. The results showed an even spread of marks with the high performing academic groups achieving better results than the average and low performing groups in Mathematics. Tables 9 and 10 indicate the results of the participants in the English reading comprehension aspect of the *Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)*. While the English reading comprehension of the participants is low, it appears that those learners who perform better academically performed better in English reading comprehension test.

A Pearson product-moment correlation was computed between English reading comprehension performance on the *Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)* and academic performance in Mathematics. There was no significant correlation between English reading comprehension tested

by means of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) and Mathematics [$r=0.386$, $n=18$, $p>0.05$] in the pilot study. However, there was a significant correlation between English reading comprehension tested by the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) and Mathematics [$r=0.421$, $n=36$, $p<0.05$] in the main study.

The fact that there was a significant correlation between English reading ability and Mathematics in the main study which had more participants, may suggest that reading ability is starting to play a more significant role when it comes to the reading and understanding of 'word problems', in understanding the explanations of the concepts in the textbook and in understanding the requirements of the question.

4.4.3 English reading comprehension and Social Sciences

Tables 4.8 and 4.9 above indicate the Social Sciences results of the participants for the end of the term. The results indicate that the participants' mean performance in the Social Sciences is average with a spread of marks from low to high amongst the participants.

A Pearson product-moment correlation was computed between English reading comprehension performance on the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) and academic performance in Social Sciences. There was no significant correlation between English reading comprehension tested by means of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) and Social Sciences [$r=0.386$, $n=18$, $p>0.05$] in the pilot study. There was also no significant correlation between reading comprehension tested by the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) and Social Sciences [$r=0.258$, $n=36$, $p>0.05$] in the main study.

The results can be summarised as follows:

	<i>Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) - Comprehension component</i> Pilot Study <i>n</i>=18	<i>Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) - Comprehension component</i> Main Study <i>n</i>=36
Academic performance	.481*	.404*
Mathematics	.386	.421*
Social Sciences	.386	.258

*Correlation is significant at the 0.05 level (2 tailed)

**Correlation is significant at the 0.01 level (2-tailed)

Table 4.13 Pearson product-moment correlations between overall academic performance, performance in Mathematics and Social Sciences and performance on the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) - Comprehension component.

Table 4.13 shows that there are significant correlations between English reading comprehension ability and academic performance in Grade 7 ESL learners in submersion contexts. By Grade 7, learners are starting to need to ‘read to learn’ and thus English reading ability is starting to play an increasingly important role in learning. There was no significant relationship between English reading comprehension ability and academic performance in the Social Sciences. As indicated above the reading comprehension of learners was generally low as the learners do not understand what they have read. In primary school learners may not rely solely on reading in order to learn. They are more teacher dependent and may rely on classroom discourse for understanding. In addition to this, in Social Sciences texts may be more context embedded than they would be in the case for Mathematics for example. Texts can be supported by maps, pictures and diagrams.

Furthermore, in primary school, tests in the Social Sciences may include multiple choice questions, match the columns and true or false questions where learners who are weak in reading comprehension may be able to guess the answers. Furthermore, the summative assessment mark in the Social Sciences may also include homework assignments, projects and classwork where weak comprehenders may get assistance from parents or peers.

4.5 English reading decoding ability and academic performance

As noted above reading ability is seen as the product of decoding and reading comprehension and therefore the relationship between decoding and academic performance was also investigated. The research question posed was:

- Between English decoding ability and English reading comprehension, which bears the more significant relationship to academic performance?

In order to answer the above question the following research sub question was posed:

- What is the decoding ability of Grade 7 ESL learners in submersion contexts?

English decoding ability was measured by the three groups' performance on the reading accuracy section of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999).

Tables 4.14 and 4.15 indicate the results of the participants in the Reading Accuracy aspect of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999).

No.	Raw score /100	Stanine	Academic group
1.	86	5	High

No.	Raw score /100	Stanine	Academic group
2.	68	3	High
3.	85	5	High
4.	63	3	High
5.	54	3	High
6.	92	6	High
7.	64	3	Average
8.	90	6	Average
9.	66	3	Average
10.	43	2	Average
11.	55	3	Average
12.	73	4	Average
13.	61	3	Average
14.	75	4	Low
15.	63	4	Low
16.	86	5	Low
17.	47	2	Low

No.	Raw score /100	Stanine	Academic group
18.	85	5	Low
Mean	70.1	4	Low
Average %	70.1		

Table 4.14 Learner performance on the reading accuracy component of the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) in the pilot study (n=18)

Table 4.14 indicates that the English reading accuracy of learners in the pilot study was not particularly high. The average percentage was low at 70.1, which would rank in a stanine of 4, also there were no learners who ranked in stanines 7-9.

The null hypothesis assumed that the three groups would not differ significantly in terms of their performance on the decoding component of the test. An ANOVA test was conducted on the three groups and homogeneity of variance was guaranteed for the three groups in terms of their performance in the decoding component of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) (Levene (2, 15)=.309, $p > 0.05$). The analysis did not yield a significant effect [$F(2, 15) = .584, p = .570$] in the pilot study.

No.	Raw score /100	Stanine	Academic group
1.	87	5	High
2.	60	3	High
3.	90	6	High
4.	95	7	High

No.	Raw score /100	Stanine	Academic group
5.	89	5	High
6.	90	6	High
7.	85	5	High
8.	94	7	High
9.	82	5	High
10.	79	4	High
11.	71	4	High
12.	82	5	High
13.	44	2	High
14.	55	3	High
15.	33	4	High
16.	39	2	Average
17.	94	7	Average
18.	34	1	Average
19.	57	3	Average
20.	40	2	Average
21.	34	3	Average
22.	32	1	Average
23.	60	3	Average

No.	Raw score /100	Stanine	Academic group
24.	93	6	Average
25.	49	2	Average
26.	44	2	Average
27.	66	3	Average
28.	76	4	Average
29.	32	1	Average
30.	46	2	Low
31.	39	2	Low
32.	58	3	Low
33.	86	5	Low
34.	45	2	Low
35.	41	2	Low
36.	82	5	Low
Mean	62	3	Low
Average %	62		

Table 4.15 Learner performance on the reading accuracy component of the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) in the main study (n=36)

Table 4.15 also indicates that as was the case with the pilot study, the English reading accuracy of the learners was low at 62 which would rank in a stanine of 3. There were also no learners that ranked in stanines 8 or 9.

The null hypothesis assumed that the three groups would not differ significantly in terms of their performance on the decoding component of the test. An ANOVA test was conducted on the three groups and homogeneity of variance was guaranteed for the three groups in terms of their performance in the decoding component of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) (Levene (2, 33)=.893, $p > 0.05$). The analysis yielded a significant effect [$F(2, 33) = 5.860, p = .007$] in the main study.

Figures 4.7 and 4.8 enable a comparison of the average performance of each of the three groups achieved on the decoding aspect of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999).

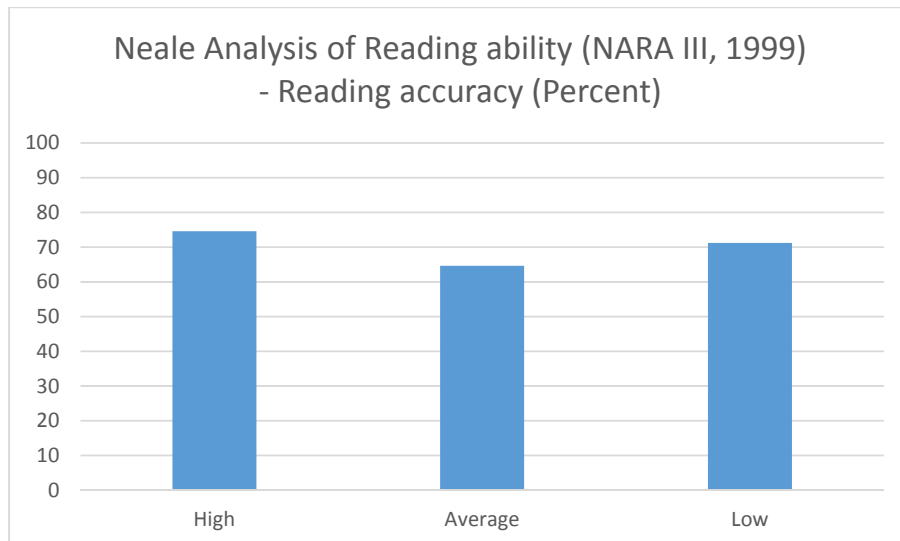


Figure 4.7 Average (%) performance of each of the three groups in the pilot study (n=18) on the reading accuracy aspect of the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)

Figure 4.7 indicates that the high performing academic groups scored better than the average and low performing groups in the reading accuracy section of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) in the pilot study.

In the pilot study, a Pearson product-moment correlation revealed that there was no significant relationship between the decoding or reading accuracy section of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) and academic performance [$r = .143, n=18, p>0.05$].

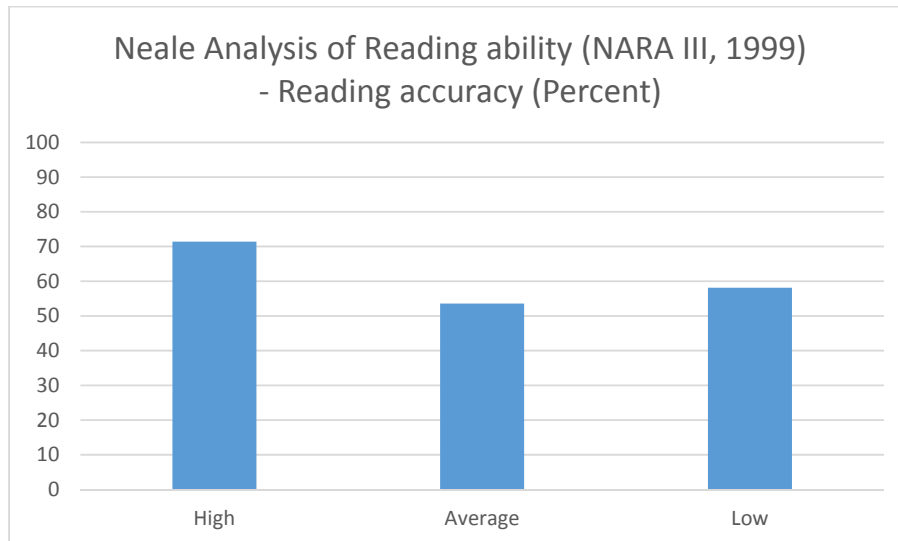


Figure 4.8 Average (%) performance of each of the three groups in the main study (n=36) on the reading accuracy aspect of the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)

Figure 4.8 indicates that the high performing academic groups scored better than the average and low performing groups in the reading accuracy section of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) in the main study.

In the main study a Pearson product-moment correlation revealed that there was a significant relationship between the decoding or reading accuracy section of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) and academic performance [$r = .465, n=36, p<0.01$]. Without decoding, reading comprehension cannot take place. Therefore, decoding ability is essential and important for academic achievement.

4.5.1 English reading decoding ability and Mathematics

In the pilot study a Pearson product-moment correlation revealed that there was no significant relationship between the decoding or reading accuracy section of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) and Mathematics [$r = .311$, $n=18$, $p>0.05$]. In the main study a Pearson product-moment correlation revealed that there was a significant relationship between the decoding or reading accuracy section of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) and Mathematics [$r = .405$ $n=36$, $p<0.05$].

4.5.2 English reading decoding ability and Social Sciences

In the pilot study a Pearson product-moment correlation revealed that there was no significant relationship between the decoding or reading accuracy section of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) and Social Sciences [$r = .151$, $n=18$, $p>0.05$]. In the main study a Pearson product-moment correlation revealed that there was no significant relationship between the decoding or reading accuracy section of the *Neale Analysis of Reading Ability* (NARA III, Australian Standardisation, 1999) and Social Sciences [$r = .299$ $n=36$, $p>0.05$].

The results can be summarised as follows:

	Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) - Reading Accuracy (Decoding) component Pilot Study n=18	Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) - Reading Accuracy (Decoding) component Main Study n=36
Academic performance	.143	.465**
Mathematics	.311	.405*
Social Sciences	.151	.299

Table 4.16 Pearson product-moment correlations between overall academic performance, performance in Mathematics and Social Sciences, and performance on the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) - Reading accuracy (Decoding component).

Table 4.16 indicates that in the main study there is a significant relationship between English reading accuracy and academic performance. As explained earlier, decoding ability is essential before reading comprehension can take place. Reading ability is a product of both these skills. There is also a significant correlation between English reading accuracy and performance in Mathematics as was the case with English reading comprehension ability. This would stand to reason, as explained earlier, that in Mathematics, learners require reading ability to understand word problems, the requirements of the question and explanations in the textbook. This means that in the main study, learners who did better in the decoding ability test did better in Mathematics and vice versa. The implication is that if teachers can improve the decoding skills of their students, learners will in turn improve their achievement in Mathematics since the two are interrelated.

Figures 4.9 and 4.10 compare the relationships of English decoding ability and English reading comprehension ability to academic performance in both the pilot and the main study.

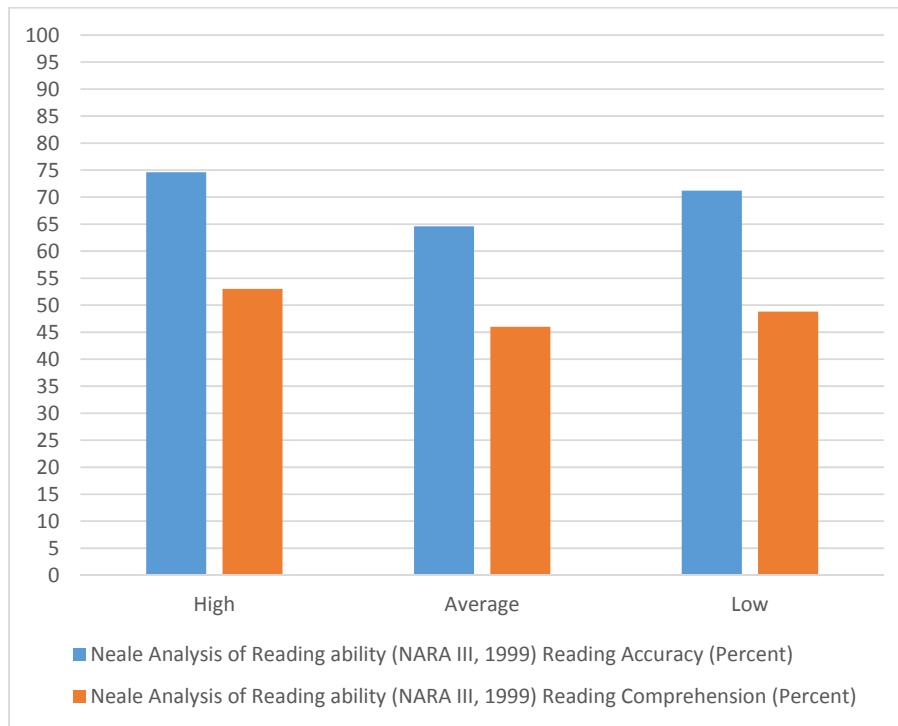


Figure 4.9 Comparison of the average performance of the three groups (%) in the pilot study (n=18) on the reading accuracy and reading comprehension aspects of the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)

Figure 4.9 compares the average performance of each of the three groups on the reading accuracy and reading comprehension aspects of the *Neale Assessment of Reading Ability* (NARA III, Australian standardisation, 1999) in the pilot study. The performance of the high and average academic groups indicates that decoding ability and reading comprehension ability are clearly related. The average performance of the low academic group indicates that while decoding ability may be good, this does not guarantee comprehension. Some learners are able to ‘bark at print’ but are not able to comprehend its meaning.

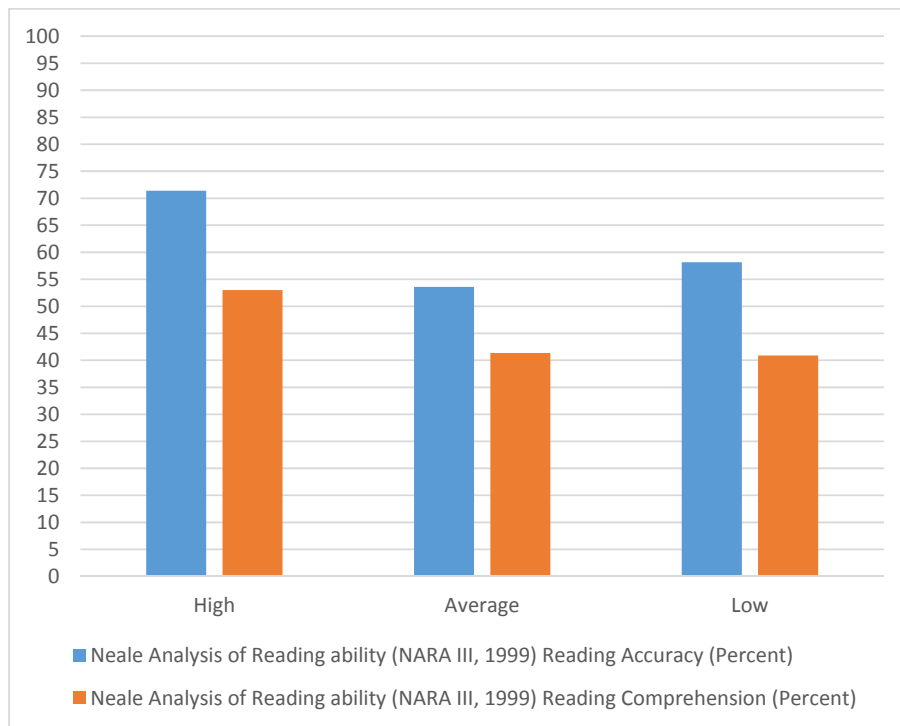


Figure 4.10 Comparison of the average (%) performance of the three groups in the main study (n=36) on the reading accuracy and reading comprehension aspects of the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999)

Figure 4.10 compares the average performance of the learners in the three groups on the reading accuracy and reading comprehension aspects of the *Neale Assessment of Reading Ability* (NARA III, Australian Standardisation, 1999) in the main study. The average performance in reading accuracy and reading comprehension ability are clearly related, which indicates that decoding is essential for comprehension but is just one aspect of reading comprehension and does not always guarantee comprehension.

4.6 The significance of the relationship of English language proficiency and English reading ability to academic performance

As outlined in the introduction, the fourth and final goal of the study was to examine whether English language proficiency or English reading comprehension ability bears the more significant relationship to relationship to academic ability. The research question was as follows:

- Between English language proficiency and English reading comprehension, which has the more significant relationship to academic performance??

Table 4.17 on the following page indicates the relationships between language proficiency, reading comprehension and academic performance.

PILOT STUDY	Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) – Comprehension component. n=18	Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) – Decoding component. n=18	Proficiency test English Second Language: Intermediate level (Reinecke, 1992). n=18
Academic performance	.481*	.143	.559*
Mathematics	.386	.311	.560*
Social Sciences	.386	.151	.563*

*Correlation is significant at the 0.05 level (2 tailed)

**Correlation is significant at the 0.01 level (2-tailed)

MAIN STUDY	Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) – Comprehension component. n=36	Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) – Decoding component. n=36	Proficiency test English Second Language: Intermediate level (Reinecke, 1992). n=36
Academic performance	.404*	.465**	.463**
Mathematics	.421*	.405*	.495**
Social Sciences	.258	.299	.461**

Table 4.17 Relationships between English language proficiency, English reading comprehension and academic performance in terms of Pearson product-moment correlations in the pilot and main study.

Table 4.17 indicates that there are indeed significant correlations between English language ability, English reading ability and overall academic performance in both the pilot and the main studies. It would appear from the above that while English reading ability and English language ability are both significantly correlated with academic performance, English language proficiency has the most significant correlation overall. More significant correlations were also noted between English language proficiency and performance in Mathematics and Social sciences than between English reading ability and these subjects. As learners leave primary school they will be increasingly required to 'read to learn'. Therefore, it is likely that as the learners progress into the higher grades reading may play a more significant role. At primary school level in the seventh year of schooling it is clear from Table 4.17 that English language proficiency is more significant with regard to academic performance. In primary school, learners are dependent on teacher talk and classroom discourse and do not have to rely on reading per se for academic success. However, this may disadvantage learners later on when English reading proficiency may play a more significant role in academic success. Reading ability improves language proficiency and is thus essential that learners are taught reading skills and are taught strategies that assist with developing the skills needed for reading to learn. In Chapter Five these strategies as well as the implications of the results in Table 4.17 with respect to policy formulation and attitudes towards language education will be discussed further.

Figures 4.11 and 4.12 enable a comparison of each of the three groups' performance in tests of each of the variables of reading accuracy, comprehension ability and language proficiency.

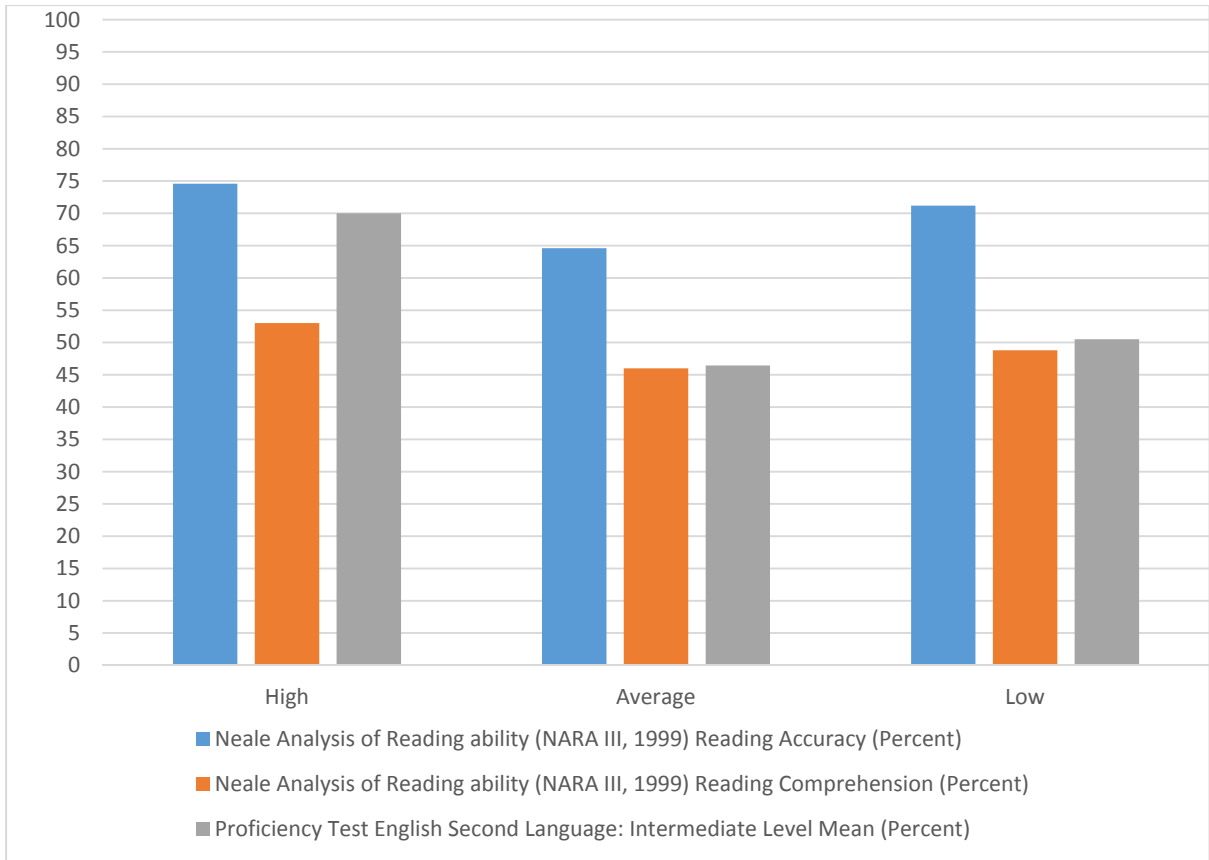


Figure 4.11 Comparison of the average (%) of the three groups in the pilot study (n=18) on the reading accuracy and reading comprehension aspects of the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) and in performance on the Proficiency test English Second Language: Intermediate level (Reinecke, 1992)

Figure 4.11 indicates that the high performing academic group scored higher on the English language proficiency test and on the English reading comprehension ability test compared to the average and low performing groups. Once again this indicates that both English language proficiency and English reading comprehension ability are related to academic performance. There is no significant difference in the groups with respect to decoding or reading accuracy and academic performance. The low performing academic group were able to decode as well as the high performing academic group. This may be indicative

that the decoding skills tested are of a lower cognitive nature so that both weak and strong students were able to perform well in them.

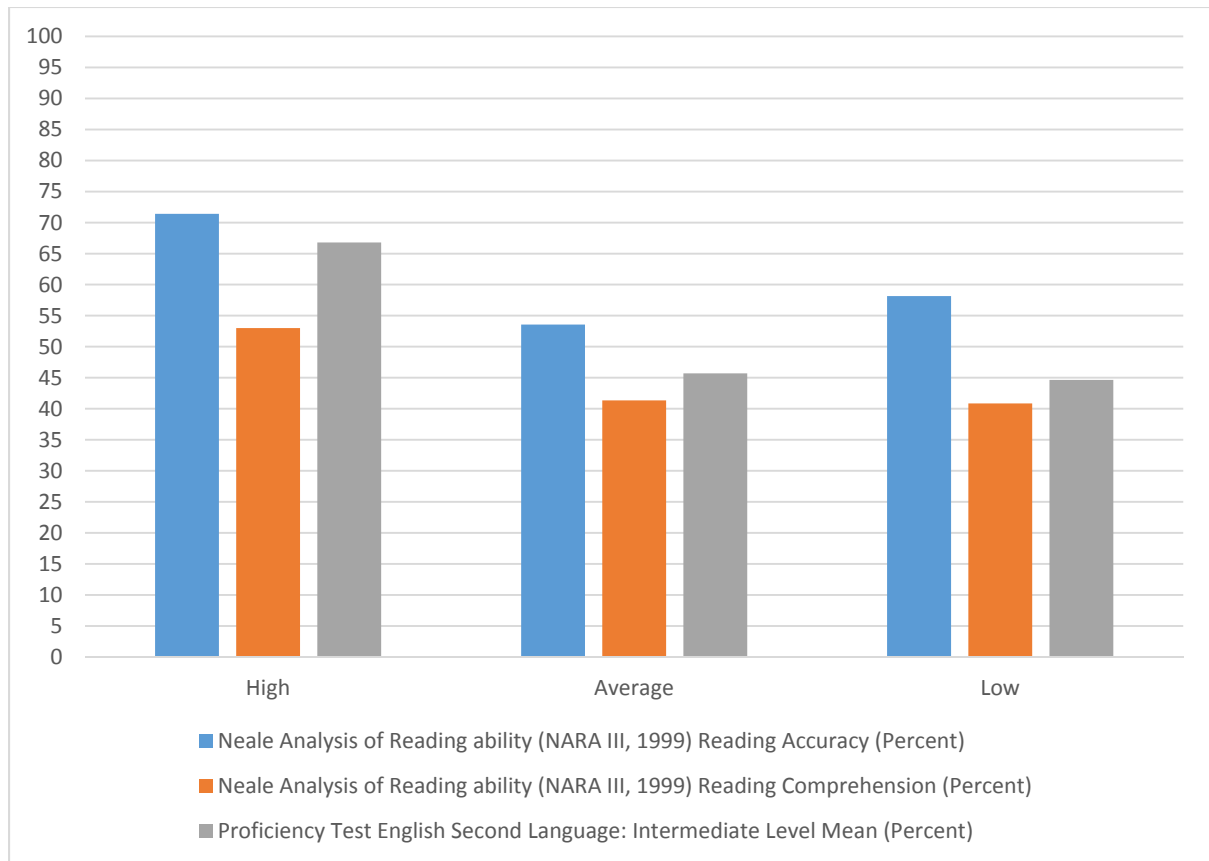


Figure 4.12 Comparison of the average (%) performance of the three groups in the main study (n=36) on the reading accuracy and reading comprehension aspects of the Neale Analysis of Reading Ability (NARA III, Australian Standardisation, 1999) and in performance on the Proficiency test English Second Language: Intermediate level (Reinecke, 1992)

Figure 4.12 indicates that the high performing academic group performed significantly better than the average and low performing academic groups on tests of English language proficiency and English reading comprehension. It is evident from the above that there is a more robust relationship between English language proficiency and academic performance. The high performing academic group in the main study also scored significantly higher in tests of reading accuracy or decoding ability. This would indicate that the relationship of

decoding to reading ability is important when it comes to decoding in order to comprehend.

At this point, it must also be noted that the summative academic performance of the learners not only includes performance on tests but also continuous assessment. Continuous assessment can include classwork, assignments and work done at home. Also, tests of all subjects are set by the teachers and are not norm referenced as is the case with standardised tests. This assessment is used as formative assessment where information is provided to teachers on whether learning outcomes are being achieved. This enables teachers to adapt their teaching strategies and to see where the learners' weaknesses and strengths are. Therefore, it has to be acknowledged that many other variables besides English reading ability and English language ability can come into play in terms of the summative academic performance of learners at the end of the term.

4.7 Conclusion

In this chapter, I have outlined the findings of the tests conducted to examine the relationships between the variables of English language proficiency, reading ability and academic performance. The main aim of the study was to investigate the extent of correlation between language ability, reading ability and academic performance. The above results indicate that while reading ability and language proficiency both bear significant relationships to academic performance, language proficiency appears to have the most robust relationship to academic performance. In the primary school, language proficiency is very significantly related to academic performance. Learners rely on teacher talk and classroom discourse and therefore need to be able to be proficient in the LOLT to succeed academically. Therefore, teaching strategies that support and enhance language proficiency are essential in order to improve academic success. In primary school, reading plays a less significant relationship to academic proficiency but as the learners progress to high school reading plays an increasingly important role in the learning process. Therefore it is essential that in the primary school reading is not neglected and that learners are taught *how* to read in order to

learn. In the next chapter I will discuss the conclusions reached and the recommendations for possible teaching strategies and policy formation in former-Model C schools where ESL learners are learning in a submersion context.

Chapter Five

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Chapter Four discussed the findings of the study. In chapter Four, the relationships between English language proficiency, English reading and academic performance amongst Grade 7 learners in a submersion context were investigated and analysed with respect to their meaning and implications. In this chapter, I will first revisit the research aims, research questions and methodology used to investigate the relationship between the variables. I will then move on to address the key findings of the study in terms of the literature and make conclusions from it. I will further address the limitations and recommendations of the study before I conclude the thesis.

5.2 Recapitulations of the aims, research questions and the methodology of the study

The main aim of the study was to investigate the relationship between English language proficiency, English reading ability and academic performance of Grade 7 ESL learners in submersion contexts. In order to address this aim, the following main research question was posed.

- *Is English reading ability or English language ability more robustly correlated to academic performance in Grade 7 ESL learners in submersion context?*

A number of research sub questions were posed to address the research question rigorously as follows:

- Is there a significant relationship between English language ability and academic performance amongst grade 7 learners in a submersion context?
- Is there a significant relationship between English language proficiency and academic performance in Mathematics and Social Sciences of Grade 7 ESL learners in submersion contexts?
- Is there a significant relationship between English reading comprehension ability and English academic performance amongst Grade 7 learners in a submersion context?
- Is there a significant relationship between English reading comprehension ability and academic performance in Mathematics and Social Sciences of Grade 7 ESL learners in submersion contexts?
- Is there a significant relationship between English decoding ability and English academic performance amongst Grade 7 learners in a submersion context?
- Is there a significant relationship between English decoding ability and academic performance in Mathematics and Social Sciences in Grade 7 ESL learners in submersion contexts?
- How robustly are English reading ability and English language ability correlated to academic performance amongst Grade 7 learners in a submersion context?
- Between English language proficiency and English reading comprehension which has the more significant relationship to academic performance?

The purpose of the study was to establish whether low English language proficiency or low English reading ability was more significantly related to academic performance in ESL learners in submersion contexts. This would enable teachers to identify areas where they could support learners and implement teaching strategies so as to assist ESL learners who have the added challenge of learning in LOLT that is not their mother tongue.

In order to achieve the above purpose, the study had four main goals. The first goal was to examine the relationship between English language proficiency and academic performance as well as the relationship between English reading ability and academic performance amongst Grade 7 ESL learners in a submersion context. The second goal of the study was to examine the relationship of the variables of English language proficiency and English reading ability to academic performance in Mathematics and Social Sciences. The third goal of the study was to examine the relationship between English reading ability and academic performance in terms of English decoding ability and English reading comprehension ability. Finally, the fourth goal of the study was to examine whether English reading ability or English language proficiency bears the more significant relationship with academic performance.

In order to achieve the above goals, a pilot study and a main study were carried out. A pilot study was undertaken in order to test the research instruments used and as a trial run for the main study. In the pilot study a sample of 18 participants was selected from Grade 7 learners in a former Model C school. One year later a larger sample of 36 participants was selected from the same context. In the main study a larger number of participants were selected in order to confirm the findings of the pilot study. A convenience sampling strategy was used as I teach Grade 7 learners in this context and therefore participants came from the learners in my own classes. However, using convenience sampling allowed me to eliminate personal bias even though the participants were personally known to me.

In both studies, quantitative research methods were used. Quantitative research is divided into two categories namely experimental and associational. This study falls under the category of associational research. The variables of English language proficiency and English reading ability were measured in terms of the participants' performance on two tests. Learners' performance on the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) was regarded as indicative of English language proficiency while their performance on

the *Neale Analysis of Reading Ability* (NARA III, Australian standardisation, 1999) was seen as indicative of their English reading ability. The results of the tests in terms of stanines were recorded on class lists.

The learners' academic performance was measured in terms of their summative assessment mark at the end of the term for all 10 learning areas. In addition to this, academic performance was also examined in terms of learners' performance in Mathematics and the Social Sciences. These results were also recorded on a class list in terms of stanines.

The participants' academic performance in terms of their summative assessment mark at the end of the term expressed as a stanine was used to divide the participants in to three groups according to academic performance. The three groups were identified as a low performing group, an average performing groups and a high performing group,

A one-way ANOVA test was conducted to determine whether the groups were indeed statistically different in terms of their academic performance. Homogeneity of variance was also tested by means of the Levene's test. One – way ANOVAs were then conducted to determine whether the groups were indeed statistically different in terms of their performance on the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) and on the *Neale Analysis of Reading Ability* (NARA III, Australian standardisation, 1999).

Furthermore, the null hypothesis with respect to the relationship between academic results and the results on the English reading and English language proficiency tests was tested by means of the Pearson product-moment correlation. This was calculated using IBM SPSS Statistics 22 software. The statistical significance of the relationship was also taken into account by taking into account the *p*-level or level of probability. A *p*-value of less than .05 was considered to be statistically significant. This method of analysis was employed for both the pilot study and the main study.

5.3 Interpretations and conclusions

The findings of the study will be outlined in terms of the four research goals outlined above. The first goal as noted previously, was to investigate the relationship between English language proficiency and academic performance. The following research sub question was posed:

- Is there a significant relationship between English language proficiency and academic performance amongst Grade 7 learners in a submersion context?

Both the pilot study and the main study indicated that there was a significant relationship between language proficiency and academic performance. Learners who scored better on a test of language proficiency tended to perform better in their summative end of terms results and vice versa.

The second goal of the study was to investigate the relationship between English Language Proficiency and academic performance in Mathematics and Social Sciences. The following research sub question was posed:

- Is there a significant relationship between English language proficiency and academic performance in Mathematics and Social Sciences of Grade 7 ESL learners in submersion contexts?

Language proficiency was significantly correlated with performance in Mathematics and Social Sciences. The above results indicate that those who performed better in Mathematics and Social Sciences performed better on the English language proficiency test and vice versa. Therefore, it is clear from the above that language proficiency is linked to academic achievement in the primary school. In the primary school learners are dependent on teacher talk and on classroom discourse for learning and so it stands to reason that English language proficiency plays a vital role in learning in an English LOLT school.

Bohlmann and Pretorius (2008:44) cite Boero, Douek and Ferrari (2002:242) who state that “only if students reach a sufficient level of familiarity with the use of natural language in... mathematical activities can they perform in a satisfactory way.” Bohlmann and Pretorius show that in order for students to study effectively in Grades 8 and 9 they need to have solid language and reading skills in the LOLT. The results of the study also clearly affirm the assertion of Lemmer (1994 cited in Lemmer, 2000:47) who states that “language minority learners face a dual challenge: learning a second language while at the same time having to use this language which they are in the process of acquiring to access academic content.” Lemmer (2000:47) indicates that while ESL learners are able to “converse in peer appropriate ways in everyday face -to-face situations in a second language” they have difficulty in “manipulating language in decontextualized academic situations.” These learners therefore run a greater risk of underachievement and school dropout (Ovando, 2000: i cited in Lemmer, 2000:47).

Lemmer (2000:48) further indicates that ESL learners are able to “demonstrate higher order thinking, such as generalising, hypothesizing, arguing etc. in their first language” but they lack the CALP needed to carry out higher “cognitive operations through the medium of English.” This reaffirms the findings of Cummins (2012) whose language interdependence hypothesis indicates that the development of bilingual students’ L1 proficiency plays a positive role in their L2 language development. Thus, providing support for the home languages of ESL learners in submersion environments can assist with improving the academic performance of these learners. Cummins (2000) does however, acknowledge that this is not a panacea for the underachievement of learners which may be due to a variety of other factors such as parental involvement, SES and parental education for example, but it may address some of the factors such as comprehension of instruction and the devaluation of these learners’ language and culture. What can be concluded from such factors is that providing learners with an opportunity to use their home language to think and reason as well as the

opportunity for these learners to be able to read in their L1 can enable these skills to be applied to the L2 and thus improve academic achievement.

The third goal of the study was to examine the relationship of English reading ability and academic performance in terms of English decoding ability and English reading comprehension ability. The following research sub question was posed:

- Is there a significant relationship between English reading comprehension ability and English academic performance amongst Grade 7 learners in a submersion context?

The results of the study indicated that there was a significant correlation between English reading comprehension ability and academic performance. Thus, learners who could read better did better academically and vice further. A further research sub question was posed as follows:

- Is there a significant relationship between English reading comprehension ability and academic performance in Mathematics and Social Sciences in Grade 7 ESL learners in submersion contexts?

While there was no significant correlation between reading ability and Mathematics in the pilot study, the main study however, showed a significant correlation between reading ability and performance in Mathematics. Learners who performed better on the English reading comprehension test performed better in Mathematics and vice versa. It is evident that in Mathematics learners are often required to read for the task which implies that they need to read the requirements of the question and need to understand what is required of them. Setati et al (2008) indicate when interacting with written texts and when discussing Mathematics, the use of language should not detract learners' attention from the mathematical task. As indicated in Chapter 2, Hoover and Gough (1990) suggest that there is a reciprocal relationship between reading ability and language proficiency. Thus, it may be as Setati et al (2008) assert, that many learners do not have the level of fluency that enables them to engage

with the mathematical tasks set in written English. Therefore, it can be concluded that those who are more proficient in English do better in Mathematics.

The study showed that there was no significant relationship between reading comprehension ability and performance in the Social Sciences. The implication here is that learners are possibly teacher dependent and still reliant on classroom discourse for academic achievement. Furthermore, in the Social Sciences, texts may be less context reduced than Mathematical texts, where texts are supported by pictures, maps, graphs and diagrams for example. Tests in the Social Sciences also could include multiple choice options, true or false questions and match the columns where the probability exists for learners to recognise and select the correct answer by guessing. In addition to this, assessment in Social Sciences also implies continuous assessment where classwork, homework assignment and projects may be included in the final term mark. It can be concluded that these factors point to some limitations in using these assessments but they are nevertheless some of the key instruments used to gauge academic performance.

Having investigated academic performance, the next research sub question posed in terms of addressing the third goal of the study was:

- Is there a significant relationship between English decoding ability and English academic performance amongst Grade 7 learners in a submersion context?

While the pilot study did not show a significant relationship between English decoding ability and academic performance, the main study showed a significant correlation between English decoding and academic performance. Therefore, those learners who were able to decode better performed better academically and vice versa. English decoding ability was also investigated in terms of its relationship with performance in Mathematics and Social Sciences and the following research sub question investigated:

- Is there a significant relationship between English decoding ability and academic performance in Mathematics and Social Sciences in Grade 7 ESL learners in submersion contexts?

While the pilot study did not show a significant relationship between English decoding and performance in Mathematics, the main study did show a significant relationship between Mathematics performance and English reading decoding ability. No significant relationship between English decoding and performance in the Social Sciences was found.

The results above indicate that, as was the case with reading comprehension ability, learners who are able to decode better do better academically. This stands to reason as decoding ability and reading ability are highly correlated as Hoover and Gough (1990) suggest. The results also show that learners who do better in Mathematics are able to decode better. These findings are consistent with Bohlman and Pretorius (2008) who indicated that literacy levels are highly correlated to performance in Mathematics. They note that the Mathematics curriculum presupposes a high level of literacy. In addition to this, they comment that Mathematics discourse is particularly dense and that a high level of precision and attention to detail is required. It can be concluded from the findings of the present study that performance in Mathematics can be improved if literacy skills including decoding and comprehending skills were improved.

Lastly, in order to address the fourth goal of the study the following research sub questions were posed:

- How robustly are English reading ability and English language ability correlated to academic performance amongst Grade 7 learners in a submersion context?
- Between English language proficiency and English reading comprehension, which has the more significant relationship to academic performance?

The study found that both English language ability and reading ability were correlated to academic performance. However, it was found that English language ability was more significantly correlated to academic performance than English reading comprehension ability in both the pilot study and the main study in Grade 7 learners in this context. These findings differ from those of Pretorius (2002) where language ability and reading ability were related to academic performance amongst undergraduate students at MEDUNSA. In that study, it was found that both reading and language proficiency were related, as both skills increased as the academic performance of the groups improved. However, the study found that language proficiency per se was not as robust a predictor of academic performance as language ability. In addition, the At Risk academic group had quite high language proficiency scores but their reading scores were well below 60% comprehension levels. The academic performance of students at tertiary level was measured in terms of their performance on the marks they had received in the final year examination. Thus, reading ability would be crucial to understand the parameters and requirements of the exam. In Grade 7 however, the principles of Outcomes-Based education make provision for continuous assessment and thus multiple forms of assessment form part of the final summative academic mark. Pretorius and Ribbens (2005: 140) show that during Grades 4-7 learners' "language, knowledge and vocabulary expand and they start using reading as a tool for learning. They start reading expository (information texts) that go beyond their immediate frame of reference." Pretorius and Ribbens do note however that listening comprehension is still more effective than reading comprehension in the intermediate phase.

To answer the main research question whether English language proficiency or English reading ability is more robustly correlated to academic performance in Grade 7 ESL learners in submersion contexts, it is important to locate the answers of the research sub questions within the conceptual framework of the study. As outlined in the conceptual framework in Chapter Two, there is a reciprocal relationship between language proficiency and reading ability. Both these are related to academic performance, supporting language ability and

implementing teaching methods that improve language ability. In turn, teaching reading strategies and assisting learners to read for meaning can improve language proficiency. With both these variables being actively supported through effective teaching strategies, academic performance can improve.

5.4 Limitations of the study

Before considering the recommendations of the study, I will consider the limitations of the study. The pilot study included a sample of 18 participants while the main study included a sample of 36 participants in a single school context. This is a particularly small sample and considers only one particular school context. The focus of the study may be widened in scope for a more accurate reflection of the relationship between English reading ability, English language proficiency and academic performance, this scope may cover a wider range of SES, school contexts and varying levels of teacher qualifications and teacher language proficiency.

Additionally, academic performance was considered to be represented by the summative end of term results for each participant. These summative results do not only represent achievement on pen and paper tests but represent many forms of assessment in addition to tests. These forms of assessment include projects, practical work, homework assignments, class work, research activities as well as pen and paper tests, so learners can therefore be helped by their parents and their peers in some of the forms of assessment. Also, tests are set by the teachers and have not been verified in terms of reliability and validity as the tests of the *Neale Assessment of Reading Ability* (NARA III, Australian standardisation, 1999) and the *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) have been. Teacher qualifications and abilities may vary and thus the tests may vary in terms of their ability to accurately represent the academic performance of learners. Furthermore, the overall academic performance mark also included subjects such as Afrikaans, Zulu and Creative Arts. The decision was made therefore to isolate two subjects namely Social Sciences and Mathematics. Performance in Mathematics for

example is often tested by means of pen and paper tests and therefore does not involve as many other forms of assessment. Performance in the Social Sciences was selected as it involves the use of a textbook and aspects of language proficiency and reading ability may be required to perform well in the Social Sciences.

The end of term, assessment is used by teachers as formative assessment where teachers are able to use these as indicators of learners' strengths and weaknesses and address these issues by means of teacher intervention strategies. However, judgements are also made in terms of the summative assessment on the report. In Grade 7, learners hand these reports to high schools in conjunction with their applications and therefore at face value these assessments are considered to be indicative of academic achievement. Additionally, the final summative assessment mark on the report is used to determine whether the learner is reading well enough to progress to the next grade.

With the implementation of CAPS (Department of Basic Education, 2012), a far greater emphasis has been placed on literacy and on each learner having a textbook. In the senior phase (Grades 7-9), school based assessment (SBA) will count for 40% of the summative year mark while the final exam will count for 60% of the year mark. Thus, learners will need to rely increasingly on their reading ability and particularly on reading for task. Therefore, the study could be extended Grade 7 learners who are covering the CAPS curriculum where more emphasis is placed on literacy and results in end of year examinations are considered as indicative of academic performance.

Similarly, as noted in Chapter 3 predictions cannot be made as a result of a correlational study and these only indicate a relationship between variables. There may be many other significant variables affecting learners' academic performance as well as performance on the tests of English language proficiency and reading ability. In addition, variables such as SES, parental involvement and gender may also influence academic achievement. There are also no

standardised tests of English reading ability in South Africa. The *Neale Assessment of Reading Ability* (NARA III, Australian standardisation, 1999) is not standardised for South African second language learners. However, the academic performance and literacy of South African ESL learners is compared with both first and second language learners of the same age and year in other countries as was the case of the PIRLS and SACMEQ studies, and therefore the use of a test not standardised for ESL South African learners was not considered as unfair. The *Proficiency test English Second Language: Intermediate level* (Reinecke, 1992) is also considered by some to as being outdated but it has been used with success in other studies (e.g. Manyike, 2007) as it still gives a good indication of the English language proficiency of learners. The test is mitigated by reading ability but reading ability forms an integral part of language proficiency and thus the test was considered to be indicative of language proficiency as a whole. Therefore, although the findings from this study were investigated in a quantitative design and are largely consistent with those of others in the literature, they are to be interpreted within the limitations of this sample. However, the fact that I used a quantitative design means that I attempted to eliminate any bias in the findings.

5.5 Recommendations of the study

In the following section, I will outline the recommendations that can be made from the results of the study with regard to teacher practice and further studies.

5.5.1 Recommendations for teacher practice

According to the findings of the study, English language proficiency was most robustly correlated with academic performance amongst Grade 7 ESL learners in submersion contexts. Not only was English language proficiency correlated strongly with summative academic performance in all ten learning areas but was also most significantly correlated with performance in Mathematics and Social Sciences. Therefore learners who are proficient in the LOLT perform better overall academically and in subjects such as Social Sciences and Mathematics. This study indicates that language proficiency is key and that teaching strategies that enhance and improve language proficiency can improve the academic performance of learners. Therefore, based on this study, it is recommended that focus needs to be firmly placed on improving the language proficiency of learners.

Cummins' (1979) language interdependence principle states that skills learnt in an L1 can be transferred to an L2. He asserts that a certain threshold of CALP needs to be reached in the L1 and then transference of skills can take place. The LiEP in South Africa makes provision for additive bilingualism which states that learners need to learn in their mother tongue. After a firm foundation in mother tongue education the switch is then made to English where content is taught in English. While in principle provision is made for additive bilingualism, in practice this does not take place. This is often due to the fact that teachers are not qualified. Teachers themselves even though they can speak a home language may not be sufficiently trained or qualified to teach it. Additionally, teachers may not be proficient in English and may consequently code-switch in the classroom which could also provide a low quality input for learners to model.

In former Model C schools learners are submerged in an English LOLT context. They have no support in their L1 and learn their first literacy in an

L2. Therefore, they are unable to transfer CALP skills from their L1 to their L2 because they have not acquired these skills in the classroom. One can argue that policy needs to change and that the LiEP needs to be implanted. Lobbying for mother tongue instruction can take place but if one looks at it both practically and economically and in terms of teacher qualifications the situation is not going to change in the near future.

Banda (2009) indicates that in Africa bilingualism does not constitute an additional language being added to a monolingual child and does not consist of multi monolingualisms. Rather in Africa learners are bi-/multilingual and in Africa learners have a repertoire of languages. Language borders and language varieties overlap and therefore languages are mutually comprehensible and many languages are spoken and understood. Therefore, English can be considered as one language in the linguistic repertoire of the learners. As Cummins (2012) asserts and as Malherbe (1969 cited in Heugh, 2002:13) shows, bilingualism does not hinder learners academically. In fact, bilingual learners tend to do better academically provided that both the languages receive support. Thus, a paradigm shift needs to take place as far as teaching multilingual learners is concerned. Classrooms need to become multilingual and multilingual teaching strategies need to be employed. Owen-Smith (2013) indicates that teachers do not have to speak the eight or nine languages that may be used by the learners in the classroom. Rather, teachers only need a single language. What the teachers need are the skills to enable learners to use their own language. Owen-Smith (2013) and the Home Language Project suggest a 'language buddy' strategy where learners are seated next to someone who speaks the same language or a language which belongs to the same family. Learners are encouraged to use the foremost cognitive tool available to them to verbalise and to problem solve. Lemmer (2000) contests that classrooms are not ideal tools for language acquisition in that classrooms are often dominated by teacher talk with little chance for learners to experiment with

language and make errors. This means that ESL learners will not necessarily just acquire English proficiency by being submerged in an English LOLT situation. Giving learners the opportunity to interact and to verbalise the subject in either the L1 or L2 can assist with improving proficiency in both languages.

Lemmer (2000) notes that a 'language friendly' approach needs to be taken in schools where learners' L1 needs to be celebrated and supported. Lemmer (2000) gives impetus to the notion of Owen-Smith (2013) where learners should be encouraged to discuss school content in their first language in order to facilitate comprehension. She encourages a 'language buddy' method where learners who speak the same language can be seated next to each other and where they are encouraged to discuss school content, to verbalise thought and to solve problems with each other in their common home language. This implies that teachers and other learners do not have to speak all 11 official languages but can still have a multilingual teaching approach in their classrooms. Thus, schools can work towards an environment where learners' home languages are given value and using them in an academic environment is encouraged. School attitudes about learners' languages can also assist to improve learners' attitudes towards their own languages where these are celebrated and where learners are encouraged to learn and develop their L1. Strategies can also be implemented that focus on vocabulary building particularly with respect to vocabulary in subjects such as Mathematics and the Natural Sciences. Marsh and Martin (2013) refer to the use of Content and Language Integrated Learning (CLIL) where language supportive methodologies are used. Attention is given both to the topic and the language of instruction. Anderson (2008) states that supporting a learner's home language and using it as an important linguistic resource can serve to promote a more positive attitude to learning in general. Deller and Price (2007) provide practical classroom-tested ideas on implementing a CLIL approach in the classroom.

Deller and Price (2007) suggest using visuals such as pictures, charts and diagrams to support understanding and learning in content subjects. They suggest that the mother tongue can be used as an important support and learning tool where students could discuss problems in their mother tongue in groups as a means to achieving the given task in English. Additionally, glossaries can be given and labels and instructions can be provided in bi-text to improve the learners' vocabulary. Learners can be given access to Home Language/English dictionaries to assist them with understanding content based terminology and concepts.

While the study showed that English language proficiency is more robustly related to academic performance, English reading ability was also significantly related to academic performance. There is a reciprocal relationship between reading ability and language proficiency and vice versa. A possible explanation for the fact that English language proficiency is more significant in terms of academic performance is the fact that learners do not *need* to read to achieve academically at the primary school level. Learners can get by on relying on teacher discourse and classroom interaction. However, as they get to high school their need to read will become increasingly crucial and thus reading strategies that involve reading for meaning, which is important when it comes to reading instructions, for the requirements of subject discourse in textbooks and in exams, need to be implemented early on in primary school learning. Howie et al (2006) indicate that by Grade 4 learners make the transition from 'learning to read' to 'reading to learn'. Thus, by Grade 7 reading to learn is an emerging skill that will play an increasingly important role in academic achievement of the learner. However only considering 'reading to learn' in Grade 4 may be very limiting. Learners can be taught that reading is important for learning at the same time as they are being taught to read. Thus, teaching reading for meaning in conjunction with teaching reading can assist learners in being able to read for a purpose. Singh (2009:102) indicates that 'reading

instructions correctly has a huge impact on their assessment tasks as well as their lives.” Thus, learners need to be able to read and follow instructions such as ‘draw the picture below’ or ‘circle the correct’ letter. Owen-Smith (2013) indicates that another very important resource in a multi-lingual classroom is the use of bi-text. Mathematics workbooks are available where instructions are provided in both English and another official language. Learners are then encouraged to focus on reading the instructions and consequently made to realise from an early age that reading for task is crucial.

Lemmer (2000) indicates that creating a bilingual print rich environment of all learners’ languages is important. Items in the classroom can be labelled in more than one language. Reading corners and libraries can be stocked with books in English and home languages and English/Home Language dictionaries can be made available in each class. Learners can be allowed to read and write in their L1 as well as English. They may be able to create bilingual projects and use their L1 in assignments.

The findings of the study also indicate a strong relationship between English decoding ability and academic performance. Hugo, Roux, Muller and Nel (2005) highlight the importance of phonological awareness and reading. They indicate that the phonological awareness task precedes other skills of learning to read such as “developing graphic knowledge, word recognition, grammatical knowledge and various text-level skills.” Learners need to be able to listen in order to produce sounds necessary for oral language, reading and written language. Hugo et al (2005: 213) cite Vaughn et al (2003) who indicate that “children who possess sound phonological awareness at an early age, read at a younger age and read more books, have a larger vocabulary and store more knowledge than others.”

Nchindila (2011:88) also indicates how understanding of meaning, plays an intrinsic role in the applications of phonetic rules. His study highlights the importance of the research that concludes that “phonological abilities at kindergarten level are good predictors of reading success in early school years.” This is also reaffirmed by Chall (1996) who asserts that comprehension is practised in all of the stages of reading including the decoding stage. As mentioned in Chapter Two, learners who have learnt their first literacy in a second language have no ‘schema’ already in place on which to map the phonetics of their second language. Wagner and Torgeson (1987) further assert that knowledge of the sound structure of a language is a necessity for the acquisition of reading skills. Learners in a submersion context are often only developing basic communication skills in English and therefore may have incomplete awareness of phonological structure. Thus, much of emerging reader’s cognitive effort may be spent on decoding, which is problematic due to the deficit in phonological awareness at the outset and therefore the development of higher order reading skills in terms of reading for meaning and reading to learn are hampered.

Research by Hugo et al (2005) reveals that phonological awareness is one of the variables that teachers can truly develop. They state that the key to phonological training or development is practising which should be done before formal reading commences at school. Since the findings of this study are consistent with the literature, it is recommended in this study that pre-school teachers in South Africa should be trained to apply phonological awareness techniques in the classroom. These activities could include playing word games, and being introduced to stories and nursery rhymes. Pre-school teachers could receive training in how to practise and apply phonological awareness techniques.

As is clear from this study, English language proficiency is highly related to academic success. Proficiency in English can be improved through teaching

techniques that support language development. Research has shown (Cummins, 1979) that support for the L1 can assist with improving proficiency in the L2. In addition to this, there is a reciprocal relationship between reading ability and language proficiency. Improving reading skills can improve language proficiency and vice versa. One of the ways suggested to address the language issue faced in South African English LOLT schools is the use of multilingual teaching strategies and through encouraging multilingualism in the classroom. This study places emphasis on the need to address the language proficiency issue by means of implementing suggested multilingual pedagogies in classroom practice.

5.5.2 Recommendations for further studies

Although the present study was based on a very limited sample, it has revealed interesting findings related to the relationship between language proficiency, reading ability and academic performance that future studies could probe further. Further studies could look at the results in the context of the CAPS curriculum where more emphasis is placed on the use of the textbook and on performance in end of year exams and where less emphasis is placed on continuous assessment.

In addition, this study was based on a sample from one context. Therefore, future studies could include samples from a variety of contexts. This sample was taken from a former Model C school in the south of Johannesburg where learners are from a variety of linguistic backgrounds. Studies could be conducted in environments where learners' linguistic backgrounds are more homogenous such as the Western Cape for example where isiXhosa and English are spoken or in Kwa-Zulu Natal where isiZulu and English are spoken. While learners in this school represented a range of SES, the school's learners are predominantly of a middle class SES. Studies could be conducted in contexts that represent learners of a lower or higher SES. Additionally, the school in this study is well resourced, has an accessible library and qualified teachers. Teacher learner

ratio in this school is 40:1 and thus studies could also be considered in contexts where teacher learner ratios are higher and where schools are not as well resourced.

Related to the need for increasing the scope of the sample, it is recommended that future studies could use both quantitative and qualitative methods so that findings regarding teacher talk and classroom dominance in South Africa can be verified through observations. Since the present study was based on Grade 7 learners, further studies are required to ascertain the effectiveness of multilingual teaching strategies in terms of learners' academic performance, learners' motivation and learner attitudes in the senior phase.

5.6 Conclusion

This study aimed to investigate the relationship between English language proficiency, English reading ability and academic performance of Grade 7 ESL learners in English LOLT submersion contexts. The quantitative associational study investigated the relationships between these variables by means of Pearson product-moment correlations. It was found that both English language ability and English reading ability were significantly correlated to academic performance and that language ability was significantly correlated to performance in Mathematics and Social Sciences. This stands to reason as learners in the primary school are dependent on classroom discourse and teacher talk. While it is the aim of the LiEP that by the time learners leave primary school they are able to read to learn, in reality this is not the case. Many high school teachers complain that Grade 8 and 9 learners still cannot recognise single high frequency words. A contribution this study makes is that it has reaffirmed this observation where it was found that reading comprehension amongst Grade 7 participants was low. Also, while reading correlated significantly with overall academic performance and with achievement in Mathematics, it was not as robustly

correlated with academic performance as English language proficiency is. Another key contribution the present study makes is that it adds to the volume of literature that indicates that support must be given to improving the English language proficiency of learners by means of explicit teaching strategies that may include glossaries, vocabulary building strategies and providing access to English/HL dictionaries. It was further indicated that decoding is also very significantly related to academic performance in primary schools. Thus, if teachers improve decoding skills they can significantly improve reading comprehension. One way to address the issue of decoding lies at the root of supporting early phonological awareness amongst learners. This can be done at pre-schools where teachers can be trained on techniques that make phonological awareness explicit. As there is a reciprocal relationship between reading ability and language proficiency, if language proficiency improves, reading will improve and vice versa. Thus, reading strategies also need to be addressed in schools. Reading cannot be taught devoid of meaning and decoding must be taught in the context of reading for a purpose.

Multilingual teaching strategies can be utilised to good effect with a limited need for resources. The only resources necessary would be a skilled teacher who is trained in multilingual teaching methods. The teacher need not be multilingual themselves as learners can concretize thinking by the verbalisation of ideas through a 'language buddy' system (Owen-Smith, 2013). Resources available in bi-text i.e. in English and Home Language are available and can be utilised to effect in assisting learners in being able to read for task or being able to read to follow instructions. Learners are therefore reading for a purpose in both their L1 and L2. CLIL teaching strategies such as these can be used to good effect in the South African classroom in order to improve language proficiency and to enhance reading skills which in turn should improve academic performance. As studies such as this one have shown, ESL learners who perform better academically in

English LOLT contexts do better on tests of language proficiency and in tests of reading ability.

5.7 References

- Aarts, R. and Verhoeven, L. 1999. 'Literacy attainment in a second language submersion context.' *Applied Psycholinguistics*, 20: 377 – 393.
- Abedi, J. 2006. 'Psychometric issues in the ELL assessment and special education eligibility.' *Teachers College Record*, 108 (11): 2282-2303.
- Alderson, J.C, Clapham, C. & Wall, D. 1995. *Language test construction and evaluation*. Cambridge: Cambridge University Press.
- Alderson, J.C. 2000. *Assessing reading*. Cambridge: Cambridge University Press.
- Anderson, N.J. 1999. 'Improving reading speed: Activities for the classroom.' *English Teaching Forum*, 37: 2-5.
- Anderson, J. 2009. 'Towards integrated second language teaching pedagogy for foreign and community/heritage languages in multilingual Britain.' *Language Learning Journal*, 36 (1): 79-89.
- August, D., Carlo, M., Dressler, C. & Snow, C. 2005. 'The critical role of vocabulary development for English Language Learners.' *Learning Disabilities Research & Practice*, 20 (1): 50-57.
- August, D. and Shanahan, T. 2006. *Developing literacy in second language learners: Development of the National Literacy Panel on language-minority children and youth*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bachman, L.F. 1990. *Fundamental considerations in language testing*. Oxford: Oxford University Press.
- Bachman, L.F. 1991. 'What does language testing have to offer?' *Tesol Quarterly*, 25 (4): 671-704.

- Bachman, L. F and Palmer, A. S. 1996. *Language testing in practice: Designing and developing useful language tests*. Oxford: Oxford University Press.
- Banda, F. 2009. 'Critical perspectives on language planning and policy in Africa.' *Stellenbosch Papers in Linguistics PLUS*, 38: 1-11.
- Beardsmore, B. H. 1995. 'The European School experience in multilingual education.' *European Studies on Multilingualism*, 4: 21-68.
- Beck, I.L. and Carpenter, P.A. 1986. 'Cognitive approaches to understanding reading: Implications for instructional practice.' *American Psychologist*, 41 (10): 1098-1105.
- Bell, M. No date. Available from Ehow.com. < http://www.ehow.com/about_4740750_define-academic-performance/html.> [Accessed on 30/12/2010]
- Bohlmann, C. and Pretorius, E. 2008. 'Relationships between Mathematics and literacy: Exploring some underlying factors.' *Pythagoras*, 67: 42-55.
- Bowyer-Crane, C., and Snowling, M. 2005. 'Assessing children's inference generation: What do tests of reading comprehension measure?' *British Journal of Educational Psychology*, 75: 189-201.
- Broom, Y. 2004. 'Reading English in multilingual South African Primary Schools' *Bilingual Education in Bilingualism*, 7 (6):506-528
- Brown, J.D. 1988. *Understanding research in second language learning*. Cambridge: Cambridge University Press.
- Cain, K., and Oakhill, J. 2006. 'Assessment matters: Issues in the assessment of comprehension.' *British Journal of Educational Psychology*, 76: 697 – 708.
- Canale, M. and Swain, M. 1980. 'Theoretical bases of communicative approaches to second language teaching and testing.' *Applied Linguistics*, 1: 1-47.

- Carrol, J.B. 1985. 'The Nature of the Reading Process.' In Singer, H. and Ruddell, R.B. eds. *Theoretical Models and Processes of Reading*. Newark: International Reading Association: 25-34.
- Carter, J. 2008. *Education in South Africa: Issues of policy coherence: Colloquium proceedings of the colloquium on 'Education and poverty reduction strategies: Issues of policy coherence.'* HSRC, 21-23 February 2008. Available from < www.hsrcpress.ac.za > [Accessed on 09 September 2010]
- Catts, H. W., Kamhi, A. G. eds. 2005. *The connections between language and reading disabilities*. New Jersey: Lawrence Erlbaum.
- Central Intelligence Agency. 2010. *The World Fact book*. Available from < www.cia.gov/library/publications/the-world-factbook/index.html.> [Accessed on 29 December 2010].
- Chall, J. 1996. *Learning to read: The great debate*. New York. McGraw-Hill.
- Chen, L. 2010. 'Pearson Product Moment Correlation Coefficient.' In: Salkind, N. ed. *Encyclopedia of Research Design*. Thousand Oaks: SAGE publications, 1023- 1027. Available at: < <http://0-dx.doi.org.oasis.unisa.ac.za/10.4135/9781412961288>.> [Accessed on 10 June 2014].
- Chick, J.K. 1992. 'English as a medium and as a subject in post-Apartheid South Africa.' *South African Journal of Applied Language Studies*. 1 (1): 29-40.
- Cloud, N. 1994. 'Special education needs of second language students.' In: Genessee, F. ed. *Educating Second Language Children: the whole Child, the whole Curriculum. The whole Community*. Cambridge: Cambridge University Press.
- Cooper, T. and Van Dyk, T. 2003. 'Vocabulary assessment: A look at different methods of vocabulary testing.' *Perspectives in Education*. 21(1): 67-77.

- Cromley, J. G. and Azevedo, R. 2007. 'Testing and refining the direct and inferential mediation model of reading comprehension.' *Journal of Educational Psychology*, 99 (2): 311 -325.
- Cummins, J. 1979. 'Linguistic interdependence and the educational development of bilingual children.' *Bilingual Education Paper Series*, 3 (2): 20-63.
- Cummins, J. 1980. 'The cross-lingual dimensions of language proficiency: Implications for bilingual education and the optimal age issue.' *TESOL Quarterly*, 14 (2): 175-187.
- Cummins, J. 2000. *Immersion education for the millennium: What we have learned from 30 years of research on second language immersion* [online] Available from <<http://www.iteachilearn.com/cummins/immersion2000.html>> [Accessed 29 September 2009]
- Cummins, J. 2000. 'Language, power and pedagogy: Bilingual children in the crossfire.' Clevedon: Multilingual Matters.
- Cummins, J. 2000. 'Putting language proficiency in its place: responding to critiques of the conversational/academic language distinction.' In: Cenoz, J and Jessner, U. eds. *English in Europe; the acquisition of a third language*. Clevedon: Multilingual Matters.
- Cummins, J. 2012. 'The intersection of cognitive and sociocultural factors in the development of reading comprehension among immigrant students.' *Read Writ*, 25: 1973-1990.
- Cutting, L.E., and Scarborough, H. 2000. 'Prediction of Reading Comprehension: Relative Contributions of Word Recognition, Language Proficiency, and Other Cognitive Skills Can Depend on How Comprehension is Measured.' *Scientific Studies of Reading*, 10 (3): 277-299.

- Department of Education. 1997. *Language in Education Policy*. [Online] Pretoria: Department of Education. Available from <http://www.education.gov.za/Documents/policies/LanguageEducationPolicy1997.pdf> [Accessed 23 May 2014]
- Department of Education. 2002. *Revised National Curriculum Statement Grades R-9 (Schools) Policy. Languages English – Home Language*. Pretoria: Department of Education.
- Department of Basic Education. 2010. *The status of the Language of Learning and Teaching (LOLT) in South African Schools: A quantitative overview*. Pretoria: Department of Basic Education.
- Department of Basic Education. 2011. *Action Plan to 2014 - Towards the Realisation of Schooling 2025*. Pretoria: Department of Basic Education.
- Department of Basic Education. 2010. *Education Statistics in South Africa 2009*. Pretoria: Department of Basic Education.
- Department of Basic Education. 2012a. *Diagnostic Report on the Annual National Assessments 2012. Grades 1-6 & 9*. Pretoria: Department of Basic Education.
- Department of Basic Education. 2012b. *Report on the Annual National Assessments 2012. Grades 1-6 & 9*. Pretoria: Department of Basic Education.
- Department of Basic Education. 2012c. *Curriculum and assessment policy statement*. Pretoria: Department of Basic Education.
- Department of Basic Education. 2014. *How many school entrants go on to pass matric?* Pretoria: Department of Basic Education. Available from <http://www.education.gov.za/Howmanyschoolentrantsgoontopassmatric/tabid/1104D.>> [Accessed 11 May 2014]

- De Lange, D. 2011. 'Erstwhile whites-only schools still a cut above the rest.' *The Star*, January 17:6
- Deller, A. and Price, C. 2007. *Teaching other subjects through English*. Oxford: Oxford University Press.
- De Wet, C. 2002. 'Factors influencing the choice of English as language of learning and teaching (LOLT) – a South African perspective.' *South African Journal of Education*, 22 (2): 119-124.
- Ducroquet, L. 1980. 'Objective or subjective testing?' *System*, 8: 237-243.
- Ellis, D. 2000. *The Breadwinner*. Toronto: Groundwood books.
- Ferrari, M., and Palladino, P. 2007. 'Foreign language learning difficulties in Italian children: Are they associated with other learning difficulties?' *Journal of Learning Difficulties*, 40 (3): 256 – 269.
- Fletcher, J. M. 2006. 'Measuring Reading Comprehension'. *Scientific Studies of Reading*. 10 (3): 323 – 330.
- Francis, D. J., Snow, C., August, D., Carlson, D. E., Miller, J. & Iglesias, A. 2006. 'Measures of reading comprehension: A latent variable analysis of the Diagnostic Assessment of Reading Comprehension.' *Scientific Studies of Reading*, 10 (3): 301-322.
- Gauteng Department of Education. 2009. *GDE Provincial Assessment for Foundation and Intermediate Phases: Winchester Ridge Primary School Baseline Report*. Johannesburg: Gauteng Department of Education.
- Genesee, F. 1985. 'Second Language Learning through immersion: A review of U.S. Programs.' *Review of Educational Research*, 55(4): 541-561.
- Genesee, F. ed. 1994. *Educating second language Children: The whole child, the whole curriculum, the whole community*. Cambridge: Cambridge University Press.

- Govender, P. 2010. *Minister lays the blame on poor English*. Sunday Times, 10 January, 4.
- Gunderson, L. and Siegel, L. 2001. 'The evils of the use of IQ tests to define learning disabilities in first and second language learners.' *The Reading Teacher*, 55(1): 48-55.
- Heugh, K. 2002. 'The case against bilingual and multilingual education in South Africa: Laying bare the myths.' *Perspectives in Education*, 20 (1): 171-196.
- Hoff, E. 2005. *Language Development*. 3 edition. Belmont, USA: Wadsworth Thomson Learning.
- Hoover, W. A. and Gough, P.B. 1990. 'The simple view of reading.' *Reading and Writing: An Interdisciplinary Journal*, 2, 127-160.
- Hofstee, E. 2006. *Constructing a good dissertation: A practical guide to finishing a Master's, MBA or PhD on schedule*. Johannesburg, South Africa: EPE.
- Howe, H. 1967. Interview in "On Libraries and Learning," *School Library Journal*, 13: 28.
- Howie, S., Venter, S., Van Staden, S., Zimmerman, L., Long, C., du Toit, C., Scherman, V. & Archer, E. 2006. *PIRLS 2006 Progress in International Reading and Literacy Study Report. South African Children's Literacy Achievement*. Pretoria: Centre for Evaluation and Assessment. University of Pretoria.
- Hudelston, S. 1994. 'Literacy development of second language children.' In: Genesee, F. ed. *Educating second language Children: The whole child, the whole curriculum, the whole community*. Cambridge: Cambridge University Press.
- Hughes, A. 2003. *Testing for language teachers*. Cambridge: Cambridge University Press.

- Hugo, A.J., Le Roux, S.G., Muller, H. Nel, N.M. 2005. 'Phonological awareness and the minimizing of reading problems: a South African perspective.' *Journal for Language Teaching*, 39 (2): 210-225.
- Jansen, J and Christie, P. eds. 1999. *Changing Curriculum: Studies on Outcomes-Based Education in South Africa*. Cape Town: Juta.
- Jha, N. K. 2008. *Research Methodology*. [online] Chandigarh [India]: Abhishek Publications. <<http://0-site.ebrary.com.oasis.unisa.ac.za/lib/unisa1/Doc?id=10416498>> [Accessed 14 May 2014]
- Jordaan, H. 2011. 'Semantic processing skills of Grade 1 English language learners in two educational Contexts.' *South African Journal of Education*, 31:518-534.
- Kamwangamalu, N.M. 2003. 'Globalization of English and language maintenance and shift in South Africa.' *International Journal of the Sociology of Language*, 164: 65-81.
- Kamwangamulu, N.M. 1997. 'Multilingualism and education in Post-Apartheid South Africa.' *Language Problems and Language Planning*, 21(3): 234-253.
- Kgosana, C. 2010. *R 2 bn School Library Crisis*. [online] Independent Online News, March, 29. <<http://www.iol.co.za/news/south-africa/r2bn-school-library-crisis-1.477793>> [Accessed 03 May 2014]
- Klingner, J.K., de Schonewise, A., de Onis. C. & Barletta, L. 2008. 'Misconceptions about the Second Language Acquisition Process.' In: Klingner, J.K., Hoover, J.J., Baca, L.M. eds. *Why do English language learners struggle with reading? Distinguishing language acquisition from learning disabilities*. California: Corwin press. 17-35.

- Klingner, J.K., and Geisler, D. 2008. 'Helping classroom reading distinguish between language acquisition and learning disabilities.' In: Klingner, J.K., Hoover, J.J., Baca, L.M. eds. *Why do English language learners struggle with reading? Distinguishing language acquisition from learning disabilities*. California: Corwin press. 57 -73.
- Lemmer, E., Meier, C. and Van Wyk, N. 2006. *Multicultural Education. An Educator's manual*. Pretoria: Van Schaik.
- Lemmer, E. M. 2000. 'Fostering language Development in Multicultural Schools in South Africa.' *Educare*, 31 (1): 38 – 61.
- Lesiak, J. and Bradley-Johnson, S. 1983. *Reading Assessment for placement and programming*. Illinois: Charles C Thomas.
- Lewis, H. 2010. *Factopedia. Fascination facts about South Africa and the world*. Cape Town: Zebra Press.
- Limbos, M. M., and Geven, E. 2001. Accuracy of teacher assessments of second language students at risk for reading disability. *Journal of Learning Disabilities*, 34: 136-151
- Lloyd, G., Montgomery, K., and Dyer, D. 2001. *English matters. English Grade 7 Anthology*. Cambridge: Cambridge University Press.
- Malcolm, C. 1999. 'Outcomes – Based Education has different forms. In: Jansen, J. and Christie, P. eds. *Changing Curriculum: Studies on Outcomes-Based Education in South Africa*. Cape Town: Juta.
- Manyike, T. V. 2007. The acquisition of academic language proficiency among Grade 7 learners in South African Schools. PhD thesis, University of South Africa, Pretoria.
- Manyike, T.V. and Lemmer, E. M. 2010. 'English reading and writing skills of Xitsonga speaking Grade 7 learners in township schools: a case study.' *Per Linguam*, 26 (1): 29-46.

- Maree, J.G. and Fraser, W.J. (Eds.) 2004. *Outcomes-Based Assessment*. Sandown: Heinemann
- Marsh, D. and Martín, M.J.D. 2013. 'Content and Language Integrated Learning.' [online] In: Chappell, C.A. ed. *The Encyclopedia of Applied Linguistics*. Blackwell publishing. Available at <<http://onlinelibrary.wiley.com/doi/10.1002/9781405198431.wbeal0190/>> [Accessed 30 September 2014]
- Masondo, S. 2013. *Our kids can't spell, count or understand what they read*, City Press. 21 July 2013: 8.
- McGuinness, D. 2005. *Language Development and Learning to Read*. Massachusetts: The MIT Press.
- McMillan, J. H. and Schumacher, S. 2010. *Research in Education. Evidence-based Inquiry*. New Jersey: Pearson.
- Michaelson, G and Hardin, J.M. 2010. 'Pearson Product Moment Correlation Coefficient.' In: Salkind, N. ed. *Encyclopedia of Research Design*. Thousand Oaks: SAGE publications, 1362-1367. Available at < <http://0-dx.doi.org.oasis.unisa.ac.za/10.4135/9781412961288.>> [Accessed 16 June 2014]
- Miles, M. B. And Huberman, A.M. 1994. *An expanded sourcebook Qualitative Data Analysis*. Thousand Oaks: Sage publications.
- Moyo, T. 2001. 'Problems in implementing instructional languages: Why the Language-in Education policy will fail.' *Language Matters*, 32 (1): 97-114.
- Nation, K. 2005. *The connection between language and reading in children with poor reading comprehension*. In: Catts, H.W. and Kamhi, A.G. eds. *The Connections between Language and Reading Disabilities*. New Jersey: Lawrence Erlbaum.

- Nchindila, B. 2011. 'The role of phonological awareness in early childhood reading in English.' *Per Linguam*, 27 (2): 87 – 101.
- Nunan, D. 1992. *Research methods in language learning*. Cambridge: Cambridge University Press.
- Oller, J. Jr. 1979. *Language tests at school*. London: Longman.
- Owen-Smith, M. 2013. 'A multi-bilingual approach to teaching Foundation Phase numeracy.' In: Desai, S., Qorro, M. and Brock-Utne, B. eds. *The Role of Language in Teaching and Learning Science and Mathematics*. Somerset West: African Minds.
- Paris, S.G. 2007. *Assessment of Reading Comprehension*. Canadian Language & Literacy research Network. [online] Available at <http://literacyencyclopedia.ca>.> [Accessed on 28 September 2010].
- Pretorius, E.J. 2000. 'Reading and the Unisa Student: Is academic performance related to reading ability?' *Progressio*, 22 (2): 35-47.
- Pretorius, E.J. 2002a. 'Reading ability and academic performance in South Africa: Are we fiddling while Rome is burning?' *Language Matters*, 33 (1): 169-196.
- Pretorius, E.J. 2002b. 'Reading and Applied Linguistics: a deafening silence?' *Southern African Linguistics and Applied Language Studies*, 20 (1): 91 – 103.
- Pretorius, E.J., and Ribbens, R. 2005. 'Reading in a disadvantaged high school: issues of accomplishment, assessment and accountability.' *South African Journal of Education*, 25 (3) 139 – 147.
- Pretorius, E.J., and Mampuru, D.M. 2007. 'Playing football without a ball: language, reading and academic performance in a high poverty school.' *Journal of Research in Reading*, 30 (1) 38 – 58.

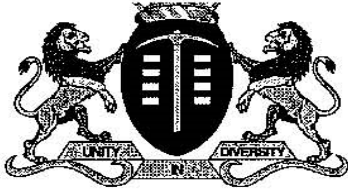
- Reddy, C. 2004. Assessment principles and approaches. In: Maree, J.G. and Fraser, W.J. eds *Outcomes-Based Assessment*. Sandown: Heinemann. 29-45.
- Reinecke, S. 1992. *Proficiency Test English Second Language Intermediate Level*. Pretoria: Human Sciences Research Council.
- Republic of South Africa. 1996a. *Constitution of the Republic of South Africa bill 1996*. As amended by the Constitutional committee. Cape Town: Government Printer.
- Republic of South Africa. 1996b. *The South African Schools Bill Act 84 of 1996*. Cape Town: Government Printer.
- Richards, J.C, Platt, J and Platt, H. 1992. *Longman dictionary of language teaching and linguistics*. London: Longman.
- Rodrigues, J., Jacobs, L., and Cloete, L. 2006. 'Providing equitable public library services to South Africa's multicultural communities.' *Mousaion*, 24 (2): 211-231.
- Roodt, M. 2011. *The school not race makes the difference*. Press release. [online] South African Institute of Race Relations. 17 January 2011. Available at <www.sairr.org.za>
- Rupley, W.H. 2005. 'Vocabulary Instruction for the Struggling Reader.' *Reading & Writing Quarterly*, 21 (3): 239-260
- Savage, R. 2006. 'Reading comprehension is not always the product of nonsense word decoding and linguistic comprehension: Evidence from teenagers who are extremely poor readers.' *Scientific Studies of Reading*, 10 (2): 143 – 164.
- Scheepers, R.A. 2003. Assessing Grade 7 students' vocabulary in different immersion contexts. MA thesis, University of South Africa, Pretoria.

- Schuyler W. H., Beavers, A. S. and Esquivel, S. 2010. 'Sample.' In: Salkind, N. ed. *Encyclopedia of Research Design*. Thousand Oaks: SAGE publications, 1296-1300.<<http://0-dx.doi.org.oasis.unisa.ac.za/10.4135/9781412961288.n395>> [Accessed 17 June 2014]
- Setati, M., Molefe, T. and Langa, M. 2008. 'Using language as a transparent resource in the teaching and learning of Mathematics in a Grade 11 multilingual classroom.' *Pythagoras*, 67: 14-25.
- Singh, R.J. 2009. Creating a foundation phase classroom that promotes reading amongst children. *Mousaion*. 27 (2): 93-107.
- Smyth, A. 2002. Building Literacy for Learning. *Language Matters*. 33 (1): 49-69.
- South Africa Institute of Race Relations. 2009/2010. *South Africa Survey. Education*. [online] Available <www.sairr.org.za/services/publications/south-africa-survey/south-africa-survey-online-2009-2010/education> [Accessed 21 December 2010.]
- South Africa Institute of Race Relations. 2012. *South Africa Survey. Education*. [online] Available from <www.sairr.org.za/services/publications/south-africa-survey/south-africa-survey-2012/07-education> [Accessed 13 August 2013.]
- Sparks, R. L. 2006. 'Is there a "disability" for learning a foreign language?' *Journal of Learning Disabilities*, 39: 544 – 557.
- Statistics South Africa. 2012. *Census 2011. Census in Brief*. Pretoria. Statistics South Africa. Report no. 03-01-41.
- Statistics South Africa. 2012. *Poverty profile of South Africa. Application of poverty lines on the LCS 2008/2009*. Report no. 03-10-03.
- Van Dyk, A., van Dyk, G., Gildenhuys, R., Fortuin, J., and van Dyk, A. (jr.). 1999. *Technology for Grade 7. Learner's book*. Cape Town: Nasou.

- Van Rooyen, D. and Jordaan, H. 2009. 'An aspect of language for academic purposes in secondary Education: Complex sentence comprehension by learners in an integrated Gauteng school.' *South African Journal for Education*, 29:271-287.
- Verbeek, D.C. 2010. *Teaching Reading for Meaning? A Case Study of the Initial Teaching of Reading in a Mainstream South African School*. D. Phil Thesis: University of KwaZulu-Natal, Durban.
- Wagner, R.K. and Torgesen, J.K. 1987. 'The nature of phonological processing and its causal role in the acquisition of reading skills.' *Psychological Bulletin*, 10: 73 – 87.
- Walk, M.J and Rupp, A. A. 2010. 'Pearson Product Moment Correlation Coefficient.' In: Salkind, N. ed. *Encyclopedia of Research Design*. [online] Thousand Oaks: SAGE publications, 1023-1027. Available from < <http://0-dx.doi.org.oasis.unisa.ac.za/10.4135/9781412961288>.> [Accessed 10 June 2014]
- Welch, T. 2012. Why mother tongue literacy isn't working: policy, pedagogy, parents and publishing. Guest address at the Annual General Meeting of the Witwatersrand Council on Education, Wits School of Education. 9 October 2012. [online] Available at < > [Accessed 03 May 2014]
- Wesche, M.B. 1983. 'Communicative testing in a Second Language.' *The Modern Language Journal*. 67:47-55.
- White, K. 2006. *The Sage Dictionary of Health and Society*. London: SAGE Publications Ltd. Available from <http://0-dx.doi.org.pasos.unisa.ac.za/10.4163/9781446215159>. [Accessed on 02 August 2014]
- Wilkinson, C., Ortiz, A. A., Robertson, P. M. & Kushner, M. 2006. 'English language learners with Reading-Related LD: Linking data from multiple

- sources to make eligibility determinations.’ *Journal of Learning Disabilities*, 39: 129 -141.
- Williams, E. 1996. Reading in two languages at year five in African primary schools. *Applied Linguistics*, 17:182–208.
- Williams, M. 2011. *Model C schools: “islands of privilege”*. IOL news, December 12. [online] Available at <<http://iol.co.za/news/south-africa/gauteng/model-c-schools-islands-of-privilege>> [Accessed on 03 May 2014]
- Zulu, C. 2007. ‘First-year university L2 patterns of performance in a test of academic reading ability.’ *Language Matters*, 38 (2): 316 – 331.

APPENDIX 1
RESEARCH APPROVAL LETTER FROM THE GAUTENG DEPARTMENT OF
EDUCATION



GDE RESEARCH APPROVAL LETTER

Date:	25 July 2011
Name of Researcher:	Lendrum J.
Address of Researcher:	P.O. Box 3244
	Florida
	1709
Telephone Number:	011 680 5217 / 072 889 9320
Fax Number:	011 680 0400
Email address:	lendrumj@gmail.com
Research Topic:	Language proficiency and reading comprehension difficulties as predictors of poor academic performance of Grade 7 English Second Language Learners in immersion contexts
Number and type of schools:	ONE Primary schools
District/s/HO	Johannesburg Central

Re: Approval in Respect of Request to Conduct Research

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

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

1. The District/Head Office Senior Manager/s concerned must be presented with a copy of this letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.
2. The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.

1

Making education a societal priority

Office of the Director: Knowledge Management and Research

9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7710, Johannesburg, 2000 Tel: (011) 355 0506
Email: David.Makhado@gauteng.gov.za
Website: www.education.gpg.gov.za

3. *A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.*
4. *A letter / document that outlines the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.*
5. *The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.*
6. *Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.*
7. *Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year.*
8. *Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.*
9. *It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.*
10. *The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.*
11. *The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.*
12. *On completion of the study the researcher must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.*
13. *The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.*
14. *Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.*

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

Kind regards



Shadrack Phele MIRMSA

[Member of the Institute of Risk Management South Africa]
CHIEF EDUCATION SPECIALIST: RESEARCH COORDINATION

25 July 2011

Office of the Director: Knowledge Management and Research

9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7710, Johannesburg, 2000 Tel: (011) 355 0506
Email: David.Makhado@gauteng.gov.za
Website: www.education.gpg.gov.za

APPENDIX 2
CONSENT LETTER

CONSENT FOR YOUR CHILD TO PARTICIPATE IN A RESEARCH STUDY

08 October 2012

Dear parents

Your child has been invited to participate in a research study. We will be comparing reading ability and language proficiency to academic performance. The decision for your child to participate or not is yours. If you decide to participate, please sign and date the bottom of this form.

Explanation of study

The study will look at what best predicts academic performance – proficiency in English as a second language or reading ability. This will enable us to modify teaching methods and thus decide to focus on activities related to improving language or whether to improve methods with regard to teaching reading. As part of the study learners will write a language proficiency test. They will also meet the researcher who will conduct a reading test. A tape recorder will be used to record the reading test. The tests will be administered during non-teaching times.

Confidentiality

All information collected will be confidential and will only be used for research purposes. This means that learners' identity will be anonymous and no one besides the researcher will know the name of the learner. The research is also conducted independently and no information will be forwarded to the Winchester Ridge Primary. When the data for the research is published the learners' names will not be used. The data will be stored on a computer and only the researcher will have access to it.

Your participation

Participating in this study is strictly voluntary. Your decision to participate will in no way affect your child's term mark or grade. There is no payment for participating in the study. If you have any questions about the study you can contact Ms J Lendrum on 072 889 9320 or by e-mail -- lendrumj@gmail.com.

Please fill in the details below and the consent form.

Thank you

J. Lendrum (Researcher)

Home Language/s (First language the learner acquired) _____

.....

I, _____ parent of

_____ in Grade 7 _____ give permission for my child to participate in the above research study.

Date _____

Signature: _____

APPENDIX 3

***TEST INSTRUMENT Proficiency test English Second Language:
Intermediate level (Reinecke, 1992)***

Catalogue Number : 2976

PROFICIENCY TEST
ENGLISH SECOND LANGUAGE
INTERMEDIATE LEVEL

1992
HUMAN SCIENCES RESEARCH COUNCIL
PRETORIA

INSTRUCTIONS

1. EACH QUESTION HAS FOUR POSSIBLE ANSWERS MARKED A, B, C AND D.
2. INDICATE THE CORRECT ANSWER ON YOUR ANSWER SHEET.
3. THERE IS ONLY **ONE** CORRECT ANSWER TO EACH QUESTION.

EXAMPLES

READ THE FOLLOWING PASSAGE CAREFULLY AND THEN ANSWER THE QUESTIONS.

- p. This illness in dogs is called *rabies*. In men it is known as hydrophobia, a word meaning hatred of water, because the sick person, in spite of terrible thirst, refuses to drink at all.

Why is the illness in men called hydrophobia?

- A. Only animals can get the illness.
- B. The patient refuses to drink anything.
- C. The patient is very thirsty at times.
- D. Water is needed to cure the illness.

THE CORRECT ANSWER IS B. NOW ANSWER THE QUESTION ON YOUR ANSWER SHEET. NEXT TO THE LETTER p DARKEN THE OVAL AROUND B.

DO NOT DARKEN ANY SPACE OUTSIDE THE OVAL AND DO NOT MAKE ANY OTHER PENCIL MARKS ON THE ANSWER SHEET.

YOU HAVE MARKED THE CORRECT ANSWER WHEN YOU HAVE DONE IT AS FOLLOWS:

p (A) (B) (C) (D)
q (A) (B) (C) (D)
r (A) (B) (C) (D)
s (A) (B) (C) (D)

NOW ANSWER THE NEXT TWO QUESTIONS ON YOUR OWN.

- q Which word can **best** replace the words underlined?

I will see you when you come back.

- A. receive
- B. leave
- C. return
- D. fetch

- r Which word **best** completes this sentence?

This is the girl ... bicycle was stolen.

- A. who
- B. which
- C. whom
- D. whose

THERE ARE MORE QUESTIONS WHICH MUST BE ANSWERED IN THE SAME WAY.

BEGIN WITH NUMBER 1 AS SOON AS YOU ARE TOLD TO DO SO. WORK QUICKLY AND CAREFULLY.

IF YOU CANNOT ANSWER A QUESTION, GO ON WITH THE NEXT ONE. IF THERE IS TIME LEFT, YOU MAY GO BACK TO THE QUESTIONS YOU HAVE NOT ANSWERED.

SEE TO IT THAT YOU MARK THE CORRECT ANSWER NEXT TO THE RIGHT NUMBER. IF YOU HAVE MADE A MISTAKE, RUB OUT THE WRONG MARK COMPLETELY AND MARK THE CORRECT ANSWER.

DO NOT TURN OVER THE PAGE UNTIL YOU ARE TOLD TO DO SO.

READ THE FOLLOWING AND ANSWER QUESTIONS 1-4

1 "You will please go outside and bath from head to foot, first," my
2 father said, "and then you shall come inside and pray for the good
3 of your soul. And if you go to such a den again, and I come to
4 know of it, I will have you outside with the fists. Remember."

5 "Yes, Dada," I said.
6 "Bath," he said.
7 And I bathed.

8 Frozen I was, and panting with cold where the wind put his sharp
9 old fingers through cracks and dug at me, and not even warm when
10 I was dry, so the prayer was chopped into bits by restless teeth, and
11 all my sense was in my pair of aching feet.

12 A beautiful ending to a day I had wished for with rich longing.

1. The writer's father was very angry because the writer ...

- A. did not want to take a bath.
- B. had been to a place his father disapproved of.
- C. was unwilling to pray for his soul.
- D. did not want to explain where he had been.

2. From this passage we learn that the father was ...

- A. not worried about his son's whereabouts.
- B. troubled about the cold outside.
- C. wishing the day would come to an end.
- D. religious and very strict.

3. The writer was panting (line 8) because ...

- A. his father dug his old fingers into him.
- B. he had been running away from his father.
- C. his feet were aching.
- D. he was feeling the cold intensely.

4. "... restless teeth ..." (line 10) means that his teeth were ...

- A. chopping the food into bits.
- B. chattering with cold.
- C. preventing him from praying.
- D. being brushed very hard.

READ THE FOLLOWING AND THEN ANSWER QUESTIONS 5-10.

AN URGENT CALL

1 Late one December afternoon, when winter was at its height, Dr
2 Cronin received a call from the outlying farm-house, three kilometres
3 from the village. A young man, Robin Blair, had been injured while
4 cutting timber. The messenger, a farm lad who had run all the way,
5 could give no particulars, but feared that the injuries were serious.
6 The doctor set out on foot, for any wheeled carriage was an
7 impossibility on those snowbound roads.

8 In the kitchen the patient lay upon a mattress before the fire. A
9 single glance at the senseless form told Dr Cronin that he was a
10 desperate case. Rob's wife, weeping beside him, was beyond
11 speech but from his father the doctor gathered the essential facts.
12 Rob and his father had gone out to fell a 15-metre fir-tree for a new
13 sheepfold. The strokes of the axe rang out clear. Then the tree,
14 toppled backward by an unexpected gust, had crashed upon Rob.
15 Only the depth of the snow had saved him from an instant death.

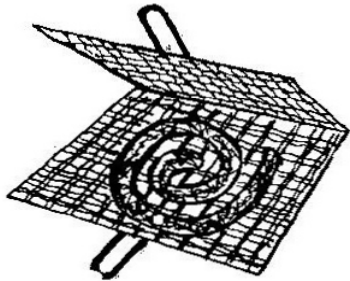
5. Dr Cronin received a message that ...

- A. Robin Blair wanted to talk to him.
- B. Robin Blair had been seriously hurt.
- C. the Blairs were going to cut timber.
- D. the Blair's farm was three kilometres from the village.

14. What is the *message* conveyed in this picture?

- A. Fish have feelings too.
- B. Think before you litter!
- C. Gas masks are effective.
- D. The ocean is dangerous!

STUDY THE FOLLOWING AND THEN ANSWER QUESTIONS 15-19



1 HAVE YOUR OWN BOEREWORS MADE-TO-MEASURE FROM A
2 FAVOURITE FAMILY RECIPE BY YOUR FRIENDLY BUTCHER, JUST
3 FOR THE ASKING. YOUR CHOICE OF MEAT; ALL ROBUST BEEF
4 OR COMBINED WITH TENDER PORK, AS YOU PLEASE. MINCED
5 TOGETHER WITH WHATEVER SPICES YOU FAVOUR TO BRING
6 OUT THAT UNIQUE TRADITIONAL FLAVOUR. AND FINALLY, FAT
7 ADDED TO YOUR LIKING. STILL THE TRADITIONAL WAY TO GET
8 THE BEST OUT OF BOEREWORS ...

9 AND FOR SOME TASTY, SPECIAL WAYS TO PREPARE SOUTH
10 AFRICA'S TRADITIONAL FAVOURITE, JUST SEND THE COUPON
11 BELOW IN AN ENVELOPE AND GET THE MEAT BOARD'S FREE
12 BOOKLET. BOEREWORS MEALS-IN-MINUTES.

13 BOEREWORS. A FEAST OF FLAVOUR ON THE TURN.

15. What, according to the advertisement, is the *last* thing done before the boerewors is actually made?

- A. Choice of meat is made.
- B. Meat is minced.
- C. Fat is added to the meat.
- D. Spices are sprinkled over the meat.

16. "Made-to-measure" (line 1) means ...

- A. all the rolls of boerewors are of equal length.
- B. the boerewors will meet your expectations.
- C. boerewors must always be of a certain thickness.
- D. the boerewors will shrink in the cooking process.

17. Why does the advertiser show the boerewors being prepared on a grill? He wants to ...

- A. stimulate the reader's taste buds.
- B. demonstrate the only way of cooking boerewors.
- C. show how to place the boerewors correctly.
- D. illustrate how to prepare boerewors.

18. What does "just for the asking" (lines 2 and 3) mean?

- A. without any trouble
- B. if it had not been for asking
- C. it would be proper to ask
- D. you need only ask

19. "as you please" (line 4) in this advertisement means ...

- A. if you ask.
- B. from your request.
- C. as you select.
- D. to your preference.

27. Which question *best* completes the following?

"I'll be taken to jail", answered Soapy when Chesty asked him, ...

- A. "Where did they take you?"
- B. "What will happen if they catch you?"
- C. "Are they setting you free?"
- D. "Do you know why?"

WHICH IS THE BEST COMPLETION FOR EACH SENTENCE?
(Questions 28-31)

28. The judge ... the accused to a year's imprisonment.

- A. condemned
- B. denounced
- C. sentenced
- D. convicted

29. The child ... with cold.

- A. wriggled
- B. bounded
- C. crept
- D. shivered

30. The eagle ... high above the cliffs.

- A. soared
- B. floated
- C. rocketed
- D. flitted

31. "Many happy returns of the day, Jane," said Amy. Amy was ...

- A. wishing her friend might return.
- B. wishing her friend good health.
- C. congratulating her friend on her return.
- D. congratulating her friend on her birthday.

WHICH IS THE BEST COMPLETION FOR EACH SENTENCE?
(Questions 32-40)

32. Since school started, he ... very hard.

- A. learnt
- B. learns
- C. are learning
- D. has learnt

33. German ... in most high schools.

- A. teaches
- B. is taught
- C. is teached
- D. be taught

34. You ... carry her books; she's a teacher.

- A. want to
- B. ought to
- C. wish to
- D. like to

35. If the doctor had arrived in time the patient's life ... saved.

- A. would be
- B. will have been
- C. will be
- D. would have been

36. The school is ... the post office.

- A. opposite
- B. over
- C. across to
- D. across

37. The Garden Route is known ... its breath-taking scenery.

- A. about
- B. under
- C. of
- D. for

38. The fox invited the stork ... dinner.

- A. for
- B. with
- C. to
- D. at

39. We agreed ... the route before leaving.

- A. on
- B. of
- C. over
- D. in

40. You can't be accepted for military training ... you are medically unfit.

- A. as
- B. although
- C. unless
- D. so

END OF TEST

APPENDIX 4

TEST INSTRUMENT - The Neale Assessment of Reading Ability (NARA III, Australian standardisation, 1999) Form 2 Questions and Recording Sheet

Neale Analysis of Reading Ability

3rd edition

INDIVIDUAL RECORD
STANDARDISED TEST

FORM
2

Name			Sex M/F	School	Year of Schooling
Date of Birth	Date of Testing	Age at Testing yrs mths		Language(s) at home	
Test Administrator				Class Teacher	

RAW SCORE SUMMARY

*Directions for administering and scoring this test can be found on pp. 10-25 of the Manual

Passage	ACCURACY			COMPREHENSION	RATE		
	Maximum Possible Score	Errors	Passage Score		Words Read	Cumulative Number of Words	Time in Seconds Per Passage
Level 1 Kitten	16	-	=		26	26	
Level 2 Surprise Parcel	16	-	=		+ 49	= 75	
Level 3 Circus	16	-	=		+ 71	= 146	
Level 4 Dragon	16	-	=		+ 91	= 237	
Level 5 Submarine	16	-	=		+ 115	= 352	
Level 6 Everest	20	-	=		+ 139	= 491	
					Total Words Read:		Total Time:
TOTAL RAW SCORES:	Accuracy:			Comprehension:	Rate = $\frac{\text{Words Read}}{\text{Total Time}} \times 60$		Rate:

STANDARDISED SCORE SUMMARY

	Raw Score	Percentile Rank	Stanine	Performance Descriptor	National Profile Level	Reading Age
ACCURACY						
COMPREHENSION						
RATE						

ERROR COUNT

	Total Mispronunciations	Total Substitutions	Total Refusals	Total Additions	Total Omissions	Total Reversals	Total Errors
% of Total Count = $\frac{\text{Error Count}}{\text{Total Errors}} \times 100$							
% of Total Count							

Summary and Recommendations:

Before beginning testing

The test administrator may believe that the content of the Practice Passages is inappropriate for use with older or more proficient readers and accordingly may decide to begin the informal reading of test passages at a level higher than passage Level 1. Such a Basal Level can be established by starting at a point where the individual makes no more than two errors on the starting passage (see p.13 of the Manual for complete instructions). Note that even older readers should not be started above passage Level 3. **NOTE:** Use only the Practice Passage appropriate for the age level.

Practice Passage X (5-7 year olds)

I have a lot of toys. I have them in a box. I like to play with all of them. But at bed-time I like my teddy bear best.

QUESTIONS

- 1. What was that story about?
Toys. A box of toys. Playing with toys. Favourite toy. Teddy bear, etc.
- 2. Where did the little boy/girl keep his/her toys?
In a box.
- 3. At night-time what was the little boy's/girl's favourite toy?
Teddy bear.
- 4. Why do you think teddy was the best toy at bed-time?
Because he is soft, cuddly, furry. Because he stops me feeling frightened, keeps me safe. Because he is my old one/toy. Or any sensible answer that shows the implied relationship of affinity between the child and a comfort toy.

Practice Passage Y (7 years and over)

My friend and I made a tree-house. We like to hide in it. We climb up the rope and pull it up after us. Then no-one knows where we are. We play space-ships. At tea-time we slide down fast and we are always first for tea.

QUESTIONS

- 1. What would you say was the best name for that story?
Tree house. Playing in a cubby house. Playing space ships or similar titles.
- 2. Who built the house in the tree?
My friend and I. The boy's/girl's friend and him/her.
- 3. How did the boys/girls get up into the tree-house?
Climbed up a rope.
- 4. How could the children's friends guess that they were playing up in the tree-house?
The rope was not there. Or it was pulled up. Or any similar response.
- 5. What game did the boys/girls play in the tree-house?
Space ships.
- 6. How did the little boys/girls manage to be always first for tea?
They slid down the rope fast.

Mispronunciations	Substitutions	Refusals	Additions	Omissions	Reversals	Total Errors	Comprehension	Time

Do not include Practice Passages in formal scoring.

FORMAL TESTING STARTS

Kitten (Level 1)

A black cat came to my house. She put her kitten by the door. Then she went away. Now I have her baby for a pet.

(26 words)

COMPREHENSION QUESTIONS

- | | |
|---|--|
| <p>1. What came to the little boy's/girl's house?
<i>A (black) cat. A kitten.</i></p> <p>2. Where did the black cat leave her kitten?
<i>By the door.</i></p> | <p>3. What did the black cat do then?
<i>She went away.</i></p> <p>4. What did the little boy/girl do with the kitten?
<i>Kept it (for a pet).</i></p> |
|---|--|

Mispronunciations	Substitutions	Refusals	Additions	Omissions	Reversals	Total Errors	Comprehension	Time

Surprise Parcel (Level 2)

A surprise parcel for Jane and Peter arrived on Saturday. Peter looked at the strange stamps. Jane undid the string. Then they shouted with delight. Uncle had sent some skates for Jane and an electric train for Peter. They were what the children had wanted for a long time. (49 words)

COMPREHENSION QUESTIONS

- | | |
|---|---|
| <p>1. On what day did the parcel arrive?
<i>Saturday.</i></p> <p>2. How do you know that Jane and Peter were not expecting the parcel?
<i>It was a surprise parcel.</i></p> <p>3. Who undid the string?
<i>Jane.</i></p> <p>4. How do you know that the parcel came from another country?
<i>It had strange stamps.</i></p> | <p>5. Who had sent the parcel?
<i>Their uncle.</i></p> <p>6. What was in the parcel for Jane?
<i>Skates.</i></p> <p>7. What was in the parcel for Peter?
<i>An electric train.</i></p> <p>8. Why were the children so pleased to receive these presents?
<i>They had wanted these things for a long time.</i></p> |
|---|---|

Mispronunciations	Substitutions	Refusals	Additions	Omissions	Reversals	Total Errors	Comprehension	Time

Everest (Level 6)

Realising the necessity to conserve the strength of the team, the leader decided to pitch an intermediate camp. The initial enthusiasm and anticipation of attaining the final camp had been subdued by the recent mishap in which one member had fallen into a crevasse. Although the rescue had been accomplished magnificently, it was obvious that the incident had hampered the original programme. The team accepted the leader's decision with relief. The tedious crawl to the plateau against incessant winds of varying violence had challenged their endurance to the limit. Every step at this height required will-power. Immediately ahead lay an unforeseen rise from which, by great misfortune, all the tracks of the advance party had disappeared. Rest was essential if the team were to withstand the arduous conditions in the concluding stages of the assault upon this unconquered peak. (139 words)

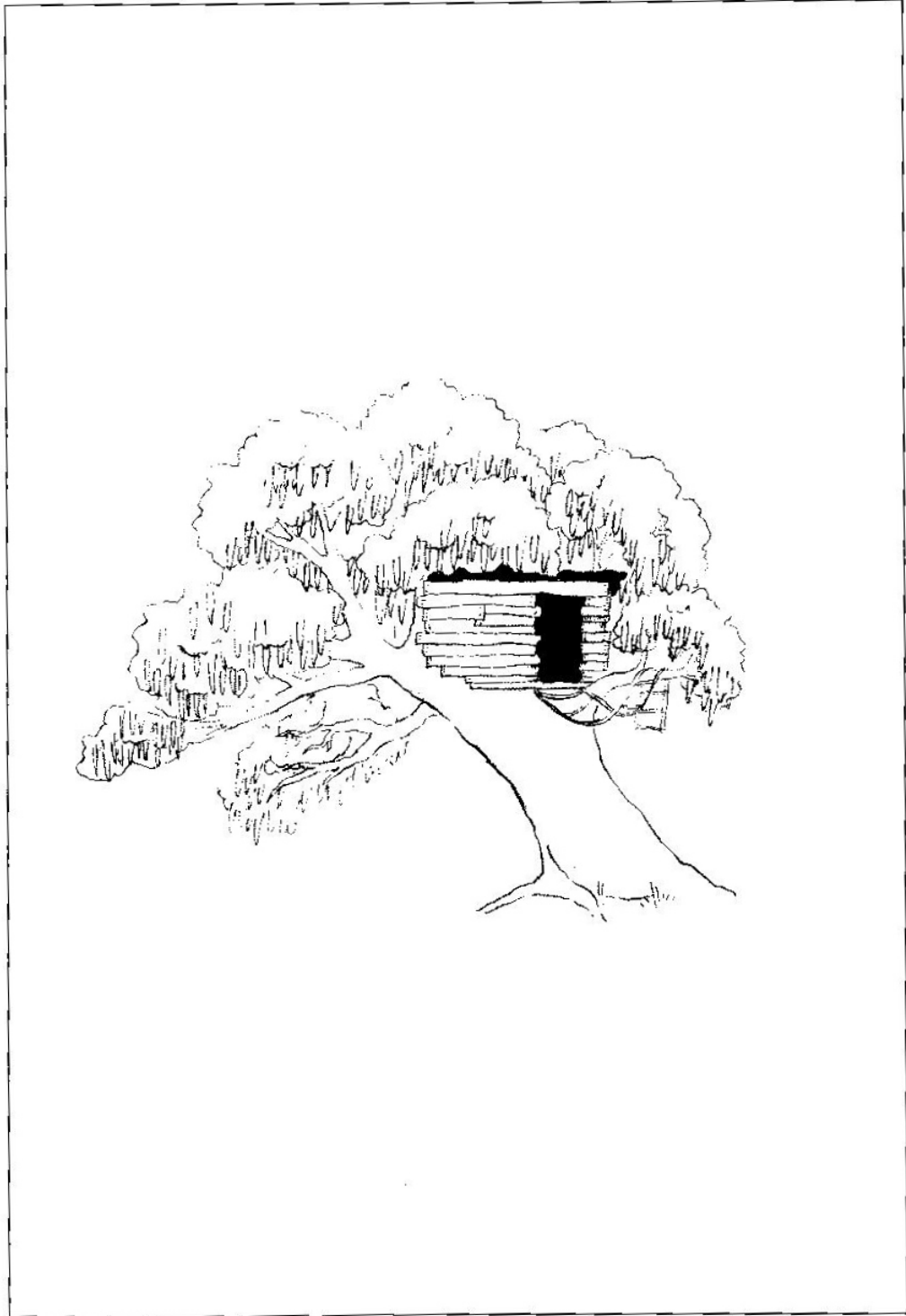
COMPREHENSION QUESTIONS

- | | |
|---|---|
| <p>1. What did the leader realise his team needed?
<i>Rest.</i></p> <p>2. What did the leader decide to do?
<i>Pitch (an intermediate) camp.</i></p> <p>3. How did the team feel about the leader's decision to stop climbing?
<i>They were pleased (relieved).</i></p> <p>4. What incident had hindered their progress?
<i>A rescue from a crevasse. One of the team had fallen into a crevasse.</i></p> | <p>5. What had made them slacken their pace of climbing to a crawl?
<i>Violent (incessant) winds.</i></p> <p>6. What lay just ahead of them?
<i>A steep rise. Slope.</i></p> <p>7. What piece of bad luck had the team noticed?
<i>The tracks of the advance party had disappeared.</i></p> <p>8. Why would it be exciting to reach the peak?
<i>It had not been conquered before. They were the first to reach it.</i></p> |
|---|---|

Mispronunciations	Substitutions	Refusals	Additions	Omissions	Reversals	Total Errors	Comprehension	Time

APPENDIX 5

***TEST INSTRUMENT - The Neale Assessment of Reading Ability (NARA III,
Australian standardisation, 1999) Form 2 Reading texts***



4

My friend and I made a
tree-house.

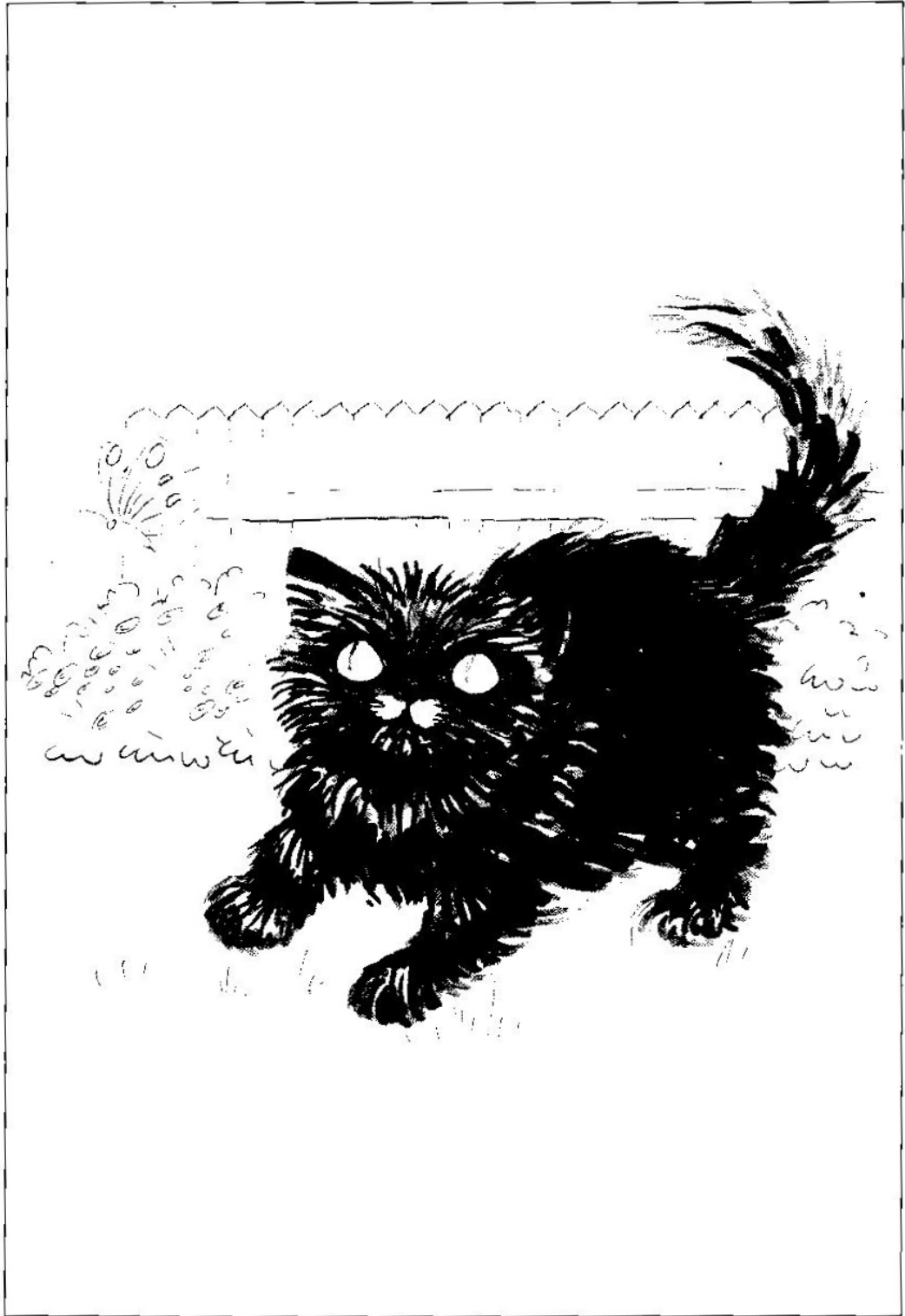
We like to hide in it.

We climb up the rope and
pull it up after us.

Then no-one knows where
we are.

We play space-ships.

At tea-time we slide
down fast and we are always
first for tea.

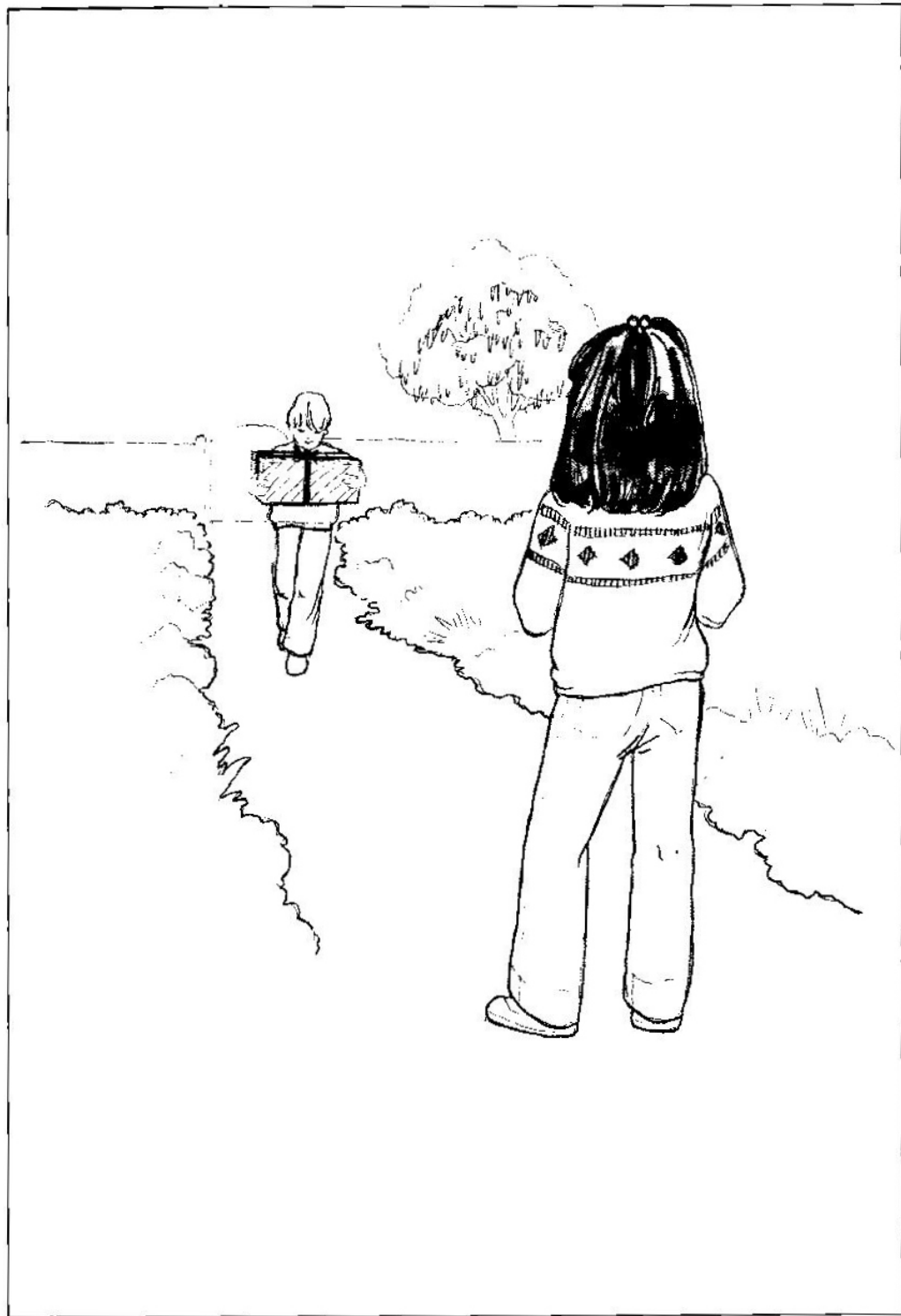


A black cat came to my house.

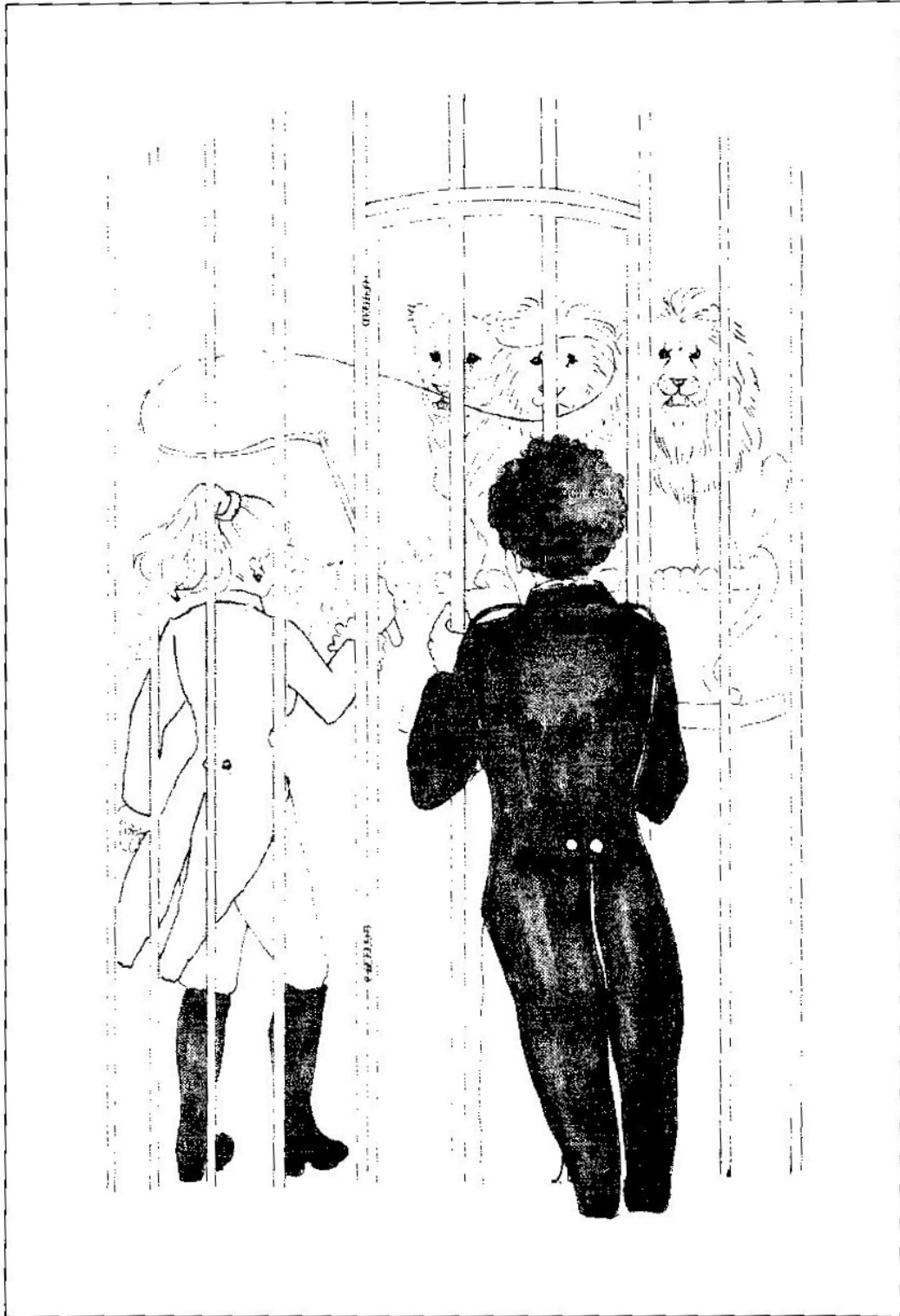
She put her kitten by the door.

Then she went away.

Now I have her baby for a pet.



A surprise parcel for Jane and Peter arrived on Saturday. Peter looked at the strange stamps. Jane undid the string. Then they shouted with delight. Uncle had sent some skates for Jane and an electric train for Peter. They were what the children had wanted for a long time.



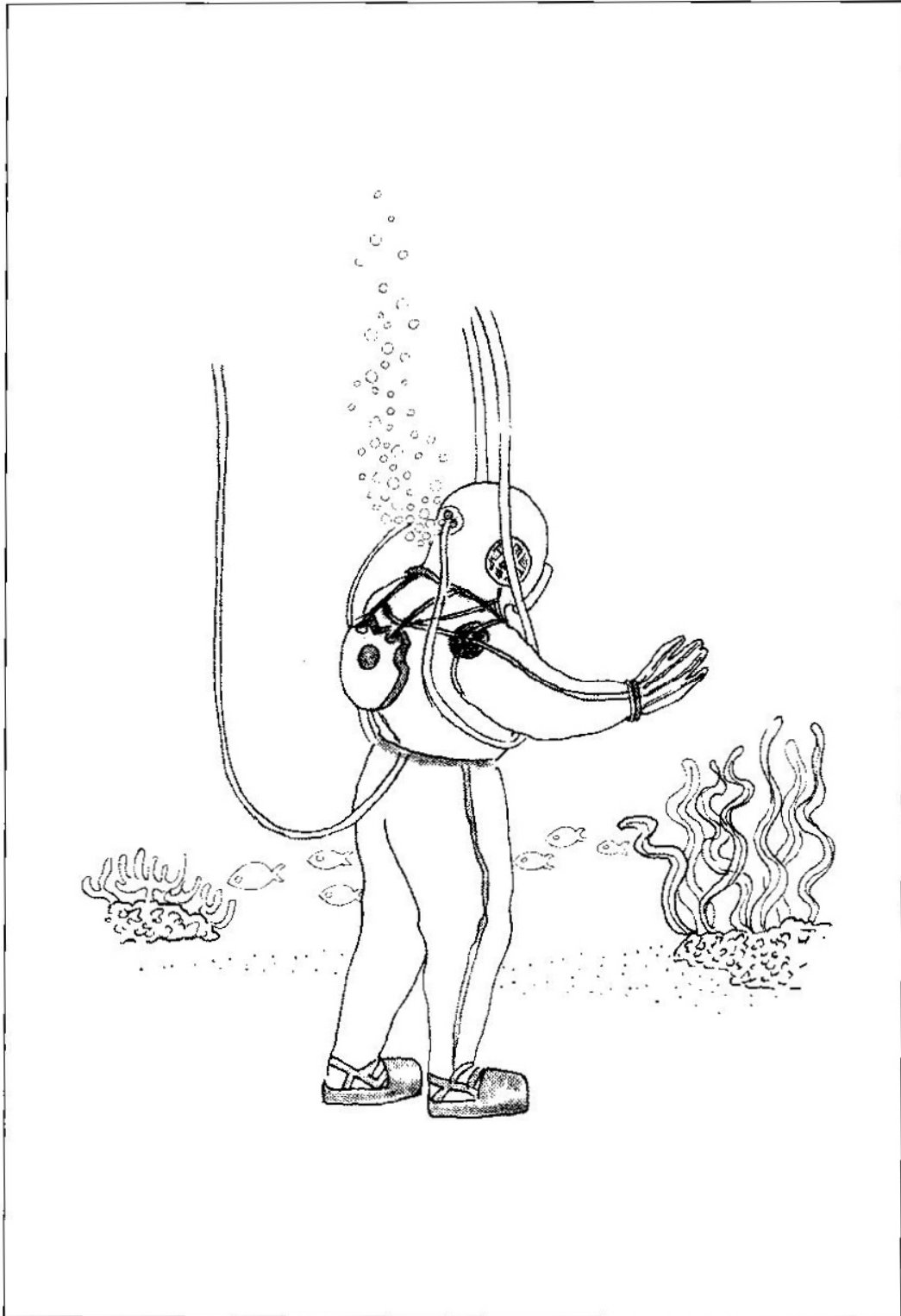
The lions' final act was in progress.
Jack stood waiting to clear the ring.
The thunder outside the circus tent had made
the lions restless. Suddenly Tina, the lion
trainer, stumbled. Her whip fell.
The youngest lion sprang towards her.

Jack leaped swiftly inside the cage,
cracking the whip with great skill. His
prompt action enabled Tina to regain control
quickly. After that brief adventure, Jack
decided upon his future work.



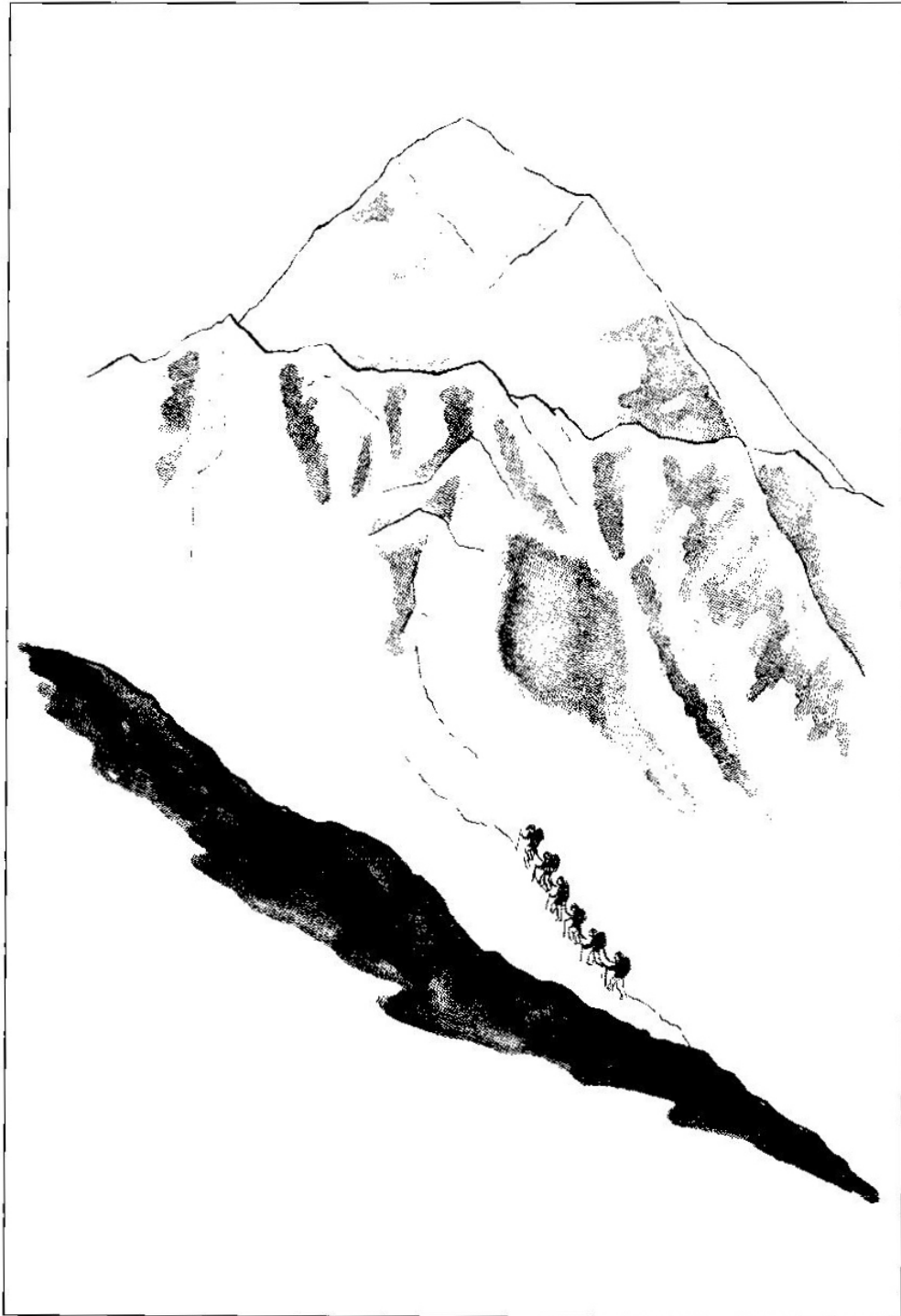
The fearful roaring of the dragon guided the Knight to the monster's territory. As the intruder crossed the dreaded marshes, the dragon charged furiously, whipping its enormous tail around the legs of the Knight's steed. Horse and rider collapsed.

The Knight now realised that he must attack when the creature was off-guard. He crouched as though wounded. The monster, accustomed to speedy victory, prepared to seize its prey. Then the Knight struck powerfully beneath the beast's outstretched wing. A despairing groan told the villagers that they would be troubled no more.



The stricken submarine lay at a depth of approximately thirty metres. Although it was common knowledge that the treacherous currents of the area would make rescue operations difficult, the crew remained disciplined and confident.

Meanwhile, outside their prison, a diver with technical equipment for their release was in peril. His lifeline had become entangled around a projection on a nearby wreckage. Experience warned him against his first impulse to dislodge the line by force. Patiently he turned and twisted. At last his calmness and persistence were rewarded. Triumphant he detached the final loop from the obstruction. Then weary but undaunted by this unpleasant accident, he proceeded to provide an escape exit for the submarine's captives.



Realising the necessity to conserve the strength of the team, the leader decided to pitch an intermediate camp. The initial enthusiasm and anticipation of attaining the final camp had been subdued by the recent mishap in which one member had fallen into a crevasse. Although the rescue had been accomplished magnificently, it was obvious that the incident had hampered the original programme.

The team accepted the leader's decision with relief. The tedious crawl to the plateau against incessant winds of varying violence had challenged their endurance to the limit. Every step at this height required will-power. Immediately ahead lay an unforeseen rise from which, by great misfortune, all the tracks of the advance party had disappeared. Rest was essential if the team were to withstand the arduous conditions in the concluding stages of the assault upon this unconquered peak.