

**TEACHING, READING AND SPELLING IN GRADE 2 ENGLISH SECOND LANGUAGE CLASSES
THROUGH THRASS METHODOLOGIES**

by

CHANTEL LEE-ANNE GOOSEN

submitted in accordance with the requirements for
the degree of

Master of Education

in the subject

Inclusive Education

at the

University of South Africa

Supervisor: Professor A.J. Hugo

August 2013

Student number: 3094-853-3

I declare that **TEACHING, READING AND SPELLING IN GRADE 2 ENGLISH SECOND LANGUAGE CLASSES THROUGH THRASS METHODOLOGIES** 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.

CHANTEL LEE-ANNE GOOSEN

DATE

ACKNOWLEDGEMENTS

My sincere gratitude to my Heavenly Father for the abundant talents and blessings You have bestowed me with.

A word of appreciation to the following individuals for your incessant support and encouragement during the research process:

- ❖ My loving husband *Clinton* for your abundant love and support
- ❖ My son, *Ethan*, for being part of the process
- ❖ *Professor Anna Hugo* for your expertise, guidance and inspiration
- ❖ *Mrs Helene Muller*, for your insightful statistical contributions
- ❖ To my parents, *Alan and Gill*, thank you for your support, motivation and belief in me
- ❖ My brothers, *John and Andrew*, for your support
- ❖ My in-laws, *Jimmy and Pat*, for your support
- ❖ *Sister Bernadette*, for your support and inspiration
- ❖ *Gillian*, for the superb editing job
- ❖ *The staff, parents and learners* for your agreeable involvement as this would not have been possible without you

In loving memory of my brother-in-law, Colin

**TEACHING, READING AND SPELLING IN GRADE 2 ENGLISH SECOND LANGUAGE
CLASSES THROUGH THRASS METHODOLOGIES**

BY: Chantel Lee-Anne Goosen
DEGREE: Master of Education
(with specialisation in Inclusive Education)
UNIVERSITY: University of South Africa
SUPERVISOR: Professor AJ Hugo

ABSTRACT

In South Africa, the topic of reading has been of great interest on the development of language since it has been estimated that 12 million learners will go through the education system per year. A key concern for all these learners is language. The majority of South African learners do not speak English as their home language, yet the dominant language of learning and teaching (LoLT) is English. It is important for these learners to become fluent in the LoLT as the future of education is dependent upon it. South Africa has been struggling since 2001 to implement a programme in schools that will improve the Literacy abilities of learners.

An in-depth study was undertaken to determine whether the THRASS methodology would possibly improve the reading and spelling abilities of Grade 2 English second learners at an inner city school in Pretoria. The research explored the reading and spelling difficulties encountered by these learners. A profile of the Grade 2 English second language learner was compiled. An understanding of how the THRASS programme works has been included. The results from the research indicated that the reading abilities of the Grade 2 learners had improved, however, there was not a significant difference in their spelling abilities.

KEY TERMS

- English second language (ESL) learners
- First Additional Language
- Home Language
- Language Development
- Phonemic Awareness
- THRASS

TABLE OF CONTENTS

List of Tables	vii
----------------------	-----

CHAPTER 1

AN INRODUCTORY ORIENTATION	1
1.1 INTRODUCTION.....	1
1.2 BACKGROUND TO THE STUDY.....	3
1.3 ANAYSIS OF THE PROBLEM	6
1.3.1 Awareness of the problem	6
1.3.2 Statement of the problem.....	9
1.4 AIM OF THE RESEARCH	10
1.4.1 Sub aims	10
1.4.2 Specific aims	11
1.5 RESEARCH METHODS.....	11
1.6 DEMARCATION OF THE RESEARCH.....	13
1.7 CLARIFICATION OF CONCEPTS	14
1.8 RESEARCH PROGRAMME.....	16
1.9 SUMMARY	17

CHAPTER 2

APPROACHES TO TEACH READING AND SPELLING WITH REFERENCE TO PHONICS AND THRASS	19
2.1 INTRODUCTION.....	19
2.2 THE IMPORTANCE OF PHONICS INSTRUCTION.....	19
2.2.1 Systematic and non-systematic programmes	20
2.3 KNOWLEDGE NEEDED BY PROFESSIONALS IN ORDER TO TEACH PHONICS	21
2.3.1 Implicit and Explicit Instruction.....	21
2.4 APPROACHES USED TO TEACH PHONICS	21
2.4.1 Synthetic phonics.....	22
2.4.1.1 Controversial points to synthetic phonics	24

2.4.2	Analytic phonics	25
2.4.3	Systematic phonics approach	27
2.4.4	Analogy-based phonics.....	27
2.4.5	Embedded phonics	28
2.4.6	Phonics-Through spelling.....	28
2.4.7	Onset/Rhyme phonics	28
2.5	THE WHOLE-LANGUAGE APPROACH	29
2.5.1	Look and Say or Whole Word approach	30
2.5.2	The combined or eclectic approach	31
2.6	THRASS.....	31
2.6.1	Introduction	31
2.6.2	The main distinguishing features of the THRASS programme.....	32
2.6.3	The ten stages to follow when teaching THRASS.....	33
2.6.3.1	Stage 1: Picture location	33
2.6.3.2	Stage 2: Letter Location	34
2.6.3.3	Stage 3: Letter Formation	34
2.6.3.4	Stage 4: Grapheme Location.....	35
2.6.3.5	Stage 5: Keyword Location	35
2.6.3.6	Stage 6: Phoneme Location	36
2.6.3.7	Stage 7: Keyword Synthesis	37
2.6.3.8	Stage 8: Key-grapheme Recall	38
2.6.3.9	Stage 9: Keyword Analysis	39
2.6.3.10	Stage 10: THRASS 500 Tests.....	40
2.6.3.11	THRASS resources	41
2.6.3.12	My THRASS experience	43
2.6.3.13	THRASS around the world	44
2.7	TEACHING READING IN THE EARLY GRADES: A TEACHER'S HANDBOOK	47
2.7.1	Introduction	47
2.7.1.1	Time allocation for Literacy Learning Programme	48
2.7.1.2	The essential features of the Literacy Learning Programme	48

2.7.1.3 The Reading and Writing Focus Time explained	48
2.7.1.4 Activities during Reading and Writing Focus Time	49
2.7.1.5 Guided and Independent Reading and Writing	50
2.7.1.6 Listening and Speaking	50
2.7.1.7 Writing and Handwriting	51
2.7.1.8 Learning Outcomes (LOs)	51
2.7.2 Teaching Reading	51
2.7.2.1 Planning the Reading and Writing Focus Time	51
2.7.2.2 Skillful readers	52
2.7.2.3 The stages of reading development	53
2.7.2.4 The usefulness of the reading stages.....	55
2.7.2.5 The five components used to teach reading	55
2.7.3 Shared Reading and Other Reading Strategies	61
2.7.3.1 Shared reading	61
2.7.3.2 Other reading strategies	66
2.7.4 Assessing reading.....	71
2.7.4.1 Reasons for assessing reading	71
2.7.4.2 What the reading results reveal.....	71
2.7.4.3 Reading level tests	72
2.7.5. The Teacher's Handbook and research project	76
2.8 ENGLISH SECOND LANGUAGE LEARNERS	76
2.9 SUMMARY	77

CHAPTER 3

A PROFILE OF GRADE 2 LEARNERS AND THE DIFFICULTIES THEY EXPERIENCE ACQUIRING ENGLISH AS A SECOND LANGUAGE	78
3.1 INTRODUCTION	78
3.2 A PROFILE OF THE GRADE 2 LEARNER	78
3.2.1 Development	78
3.2.1.1 Physical development	78
3.2.1.2 Cognitive development	80

3.2.1.3 First language development	83
3.2.1.4 Second language development	86
3.2.1.5 Psychosocial development	89
3.2.2 Physical aspects	92
3.2.2.1 Nutrition	92
3.2.2.2. Health	98
3.3 AN OVERVIEW OF THE ENGLISH LANGUAGE	99
3.3.1 Regular and Irregular languages	100
3.4 SUMMARY	103

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGIES	105
4.1 INTRODUCTION	105
4.2 THE RESEARCH PROBLEM AND AIM	105
4.3 RESEARCH HYPOTHESIS	106
4.4 RESEARCH DESIGN	106
4.4.1 Sampling	107
4.4.2 Instruments and Administration	108
4.4.3 Participant observations	109
4.4.4 Collection of Data	110
4.5 ANALYSIS OF DATA	110
4.6 VALIDITY AND RELIABILITY	111
4.6.1 Validity	111
4.6.1.1 Face and content validity	111
4.6.1.2 Concurrent and predictive validity	112
4.6.1.3 Construct validity.	112
4.6.2 Reliability.....	113
4.7 SUMMARY	113

CHAPTER 5

RESULTS OBTAINED FROM THE INVESTIGATION	114
--	------------

5.1	INTRODUCTION	114
5.2	RELIABILITY OF THE READING AND SPELLING TESTS	114
5.3	VALIDITY	115
5.3.1	Content validity	115
5.3.2	Construct validity	116
5.4	SCORES OBTAINED FOR THE READING AND SPELLING TESTS.....	116
5.5	TESTING THE HYPOTHESIS.....	122
5.5.1	Testing of the hypothesis	122
5.6	QUALITATIVE RESEARCH	128
5.7	SUMMARY	129

CHAPTER 6

	EDUCATIONAL IMPLICATIONS YIELDED FROM THE RESEARCH AND RECOMMENDATION FOR FURTHER RESEARCH	131
6.1	INTRODUCTION.....	131
6.2	CONTRIBUTIONS YIELDED FROM THE RESEARCH	133
6.3	EDUCATIONAL IMPLICATIONS AND RECOMMENDATIONS	134
6.3.1	The teacher in the classroom	135
6.3.2	The parent at home	137
6.4	MOTIVATIONAL ASPECTS	138
6.5	LIMITATIONS REGARDING THE RESEARCH AND SUGGESTIONS FOR FURTHER RESEARCH	139
6.6	CLOSING REMARKS	139
	Bibliography	141
	Appendix A.....	153
	Appendix B.....	156
	Appendix C.....	159
	Appendix D.....	161

List of Tables

Table 5.1: Reading and spelling scores obtained for the control group during the first year of the research	117
Table 5.2: Reading and spelling scores obtained for the control group during the second year of the research	118
Table 5.3: Reading and spelling scores obtained for the experimental group during the first year of the research	119
Table 5.4: Reading and spelling scores obtained for the experimental group during the first year of the research	120
Table 5.5: Frequency distributions of biographical properties	121
Table 5.6: The pre-and post-reading and spelling measures of the respondents and the difference calculated between pre- and post-spelling and reading measures	123
Table 5.7: Two-factor analysis of variance on the differences between pre-and post-intervention reading scores.....	126
Table 5.8: Two-factor analysis of variance on the differences between pre-and post-intervention spelling scores.....	127

CHAPTER 1

AN INTRODUCTORY ORIENTATION

1.1 INTRODUCTION

In 1994 South Africa became a democratic country where the lines of race were abolished and apartheid came to an end. This means that the children of South Africa are now able to receive education wherever they desire. This also means that more and more children are placed in schools where the language of instruction is different from their home language.

The National Census that was conducted in 1996 by Statistics South Africa (1996) indicated that the most common first home language was isiZulu, spoken by 23% of people, followed by isiXhosa, 18%. Some 14% of South Africans spoke Afrikaans as their first home language, and 9% English. This means that many children do not speak English. It may be that the children only speak English at school and prefer to use their home language outside the classroom.

In South Africa eleven official languages are spoken. The Constitution of South Africa (1996) has made provisions for the citizen's rights to his or her language, yet the language of instruction in schools is English (Landsberg, Krüger & Nel 2005:150). According to the Revised National Curriculum Statement (Department of Education 2003:20) home language assumes that learners are competent readers, and that they are able to understand and speak the language that has been taken at home language level. The Assessment Standards have been developed so that the learners are able to develop their desired competencies. First Additional Language assumes that learners do not necessarily have the required knowledge of the language when they first arrive at school (Department of Education 2003:20). The curriculum allows learners to develop their ability to read, understand and speak the language and in so doing, the learners' literacy skills will be developed. It is possible that the children have no one at home who can assist in reinforcing what they learn at school. This may be due to parents' work commitments as well as parents not being equipped with the required skills as to how phonics in reading and spelling ought to be taught.

For these reasons it is important for South African children, especially the children learning in a language that is not their home language, to follow a suitable language programme. The South African Schools Act (Act 84 of 1996) determines in section 5 that: 'Learners must be allowed to enter public schools where they will be provided with the necessary educational requirements that will not unfairly discriminate against them in any way'. Section 20:1(a) of the Schools Act states: 'Subject to this Act, the governing body of a public school must promote the best interest of the school and strive to ensure its development through the provision of quality education for all learners at the school'. This attitude should not only be adopted by public schools but should be the attitude of all schools around South Africa.

The policy that has been adopted and used in our schools is the Education White Paper 6 – Special Needs Education. This document states that inclusion is about recognising and respecting the differences that are found among all learners and building on the similarities that they share (Department of Education 2001:17). Inclusion supports all learners, educators and the system as a whole in order to meet the full range of learning needs. The focus of inclusion lies on the teaching and learning factors, where the emphasis is placed on the development of good teaching strategies that will be beneficial to all learners. Inclusion also focuses on overcoming barriers in the system that prevent it from meeting the full range of learning needs. The focus is on adapting the support systems that are available in the classroom.

According to Jongejan, Verhoeven and Siegel (2007:835) children who attend schools in which the language of instruction is different from their home language experience a double challenge in that they are required to master academic skills as well as a new second language. Among the academic skills Foundation Phase learners are required to master are essential reading and spelling skills (Jongejan, Verhoeven & Siegel 2007:835). By the end of the second term, Grade 1 learners are required to identify the letter-sound relationships of all the single sounds (Department of Education 2008a:26). By the end of their Grade 1 year the learners should be able to recognise consonant digraphs (ch, sh, th) at the end of words. They should also be able to recognise the silent 'e' at the end of words (Department of Education 2008a:27). This could be a mammoth task for the young learners who

are acquiring English as a second language. If necessary a suitable programme should be implemented to aid Grade 2 learners in their second language proficiency.

The term First Additional Language (FAL) is used in South African schools to describe learners who are learning in a language that is different from their home language or mother tongue (Department of Education 2010:6). The term English Second Language Learners will be used in this study to describe the learners who are learning in a language that is different from their home language.

1.2 BACKGROUND TO THE STUDY

Literacy teaching takes place when teachers teach their learners to speak, read and write in a language. For a language such as English, literacy teaching usually consists of three levels: word level, sentence level and text level. Word level teaching provides the building blocks in order to write words. During this level the learners will be taught the phonemes (speech sounds) and graphemes (spelling choices) necessary to write words correctly. The building blocks that are necessary in the sentence level is the learner's knowledge of spoken and written words. The building blocks that are necessary in the text level is the learner's knowledge of spoken and written sentences. All three of these levels require that teachers teach the necessary speaking, listening, reading and writing skills (Davies & Ritchie 2003:10). It is essential that teachers are acquainted with various approaches that can be used to teach reading and spelling.

Person (2004, as cited in Tomlinson 2007:22) says that the experts do not seem to be able to agree on how reading should be taught. A debate took place on phonics versus the whole language approach which was described as the 'reading wars'.

Coles (2000, as cited in Tomlinson 2007:22) speaks about the whole-language or whole word approach which assumes that reading and general language skills are acquired by means of integrated use and not by learning phonics and word attack skills separately. This approach has learners reading first, and then vocabulary development as stories are discussed. Thompson and Nicholson (1999, as cited in Teele 2004:54) ascertain that this approach teaches the learners to understand the meanings of words before they are taught decoding skills. The language-approach

puts the emphasis on the reading and writing relationship. The focus of this approach lies on linking reading and comprehension skills. Teachers who use this approach use phonics and word recognition as a tool in which to assist their teaching. Their main focus, however, is on the understanding and comprehension of words as they appear in the text (Teele 2004:54).

The bottom-up, also known as phonics, approach is where learning starts with the components of words and gradually moves towards reading as a whole (Tomlinson 2007:22). Phonics is an understanding that there is an expected association between phonemes and graphemes, the letters are represented by the sounds in the written language. If children are to benefit from phonics instruction, they also need to be taught phonemic awareness (Armbruster, Lehr & Osborn 2001:3). Phonemic awareness is a commonly used term in reading, and is often misinterpreted. One misinterpretation is that phonemic awareness and phonics is the same thing. Phonemic awareness is not the same as phonics. Phonemic awareness is an understanding of the sounds in spoken language and how sounds work together, to make words. Phonics has been criticised as it does not enhance the child's comprehension skills (Armbruster, Lehr & Osborn 2001:3).

Jongejan, Verhoeven and Siegel (2007:835-847) examined the basic literacy skills and related processes of first through to fourth grade learners who spoke English as their first language (L1), as well as learners who were English second language learners (ESL). The L1 speakers and ESL learners performed very similarly with regards to their phonological awareness, word and pseudoword reading as well as word and pseudoword spelling tasks. The ESL learners performed more poorly on the tasks that required verbal working memory and syntactical awareness. The ESL learners, however, were at an advantage when it came to lexical access. (Lexical access is the ability to efficiently access lexical information and is measured in a rapid naming test. The learner could be asked to retrieve phonological labels in response to visual stimuli such as colours, pictures, numbers or letters). The results from this research would suggest that for L1 learners, phonological awareness as well as lexical access is the main process required for basic reading ability in Grades 1 and 2. The same is true for the ESL learners in the same grades. Phonological

awareness was found to be the strongest predictor of word reading ability in Grades 3 and 4.

The THRASS Whole-Picture Keyword Phonics programme has been primarily designed for word level teaching, that is, the phonics component of literacy teaching. The essential components of the programme are the forty four phonemes that consist of twenty four consonants and twenty vowels, and the one hundred and twenty keygraphemes, that are made up of sixty consonants and sixty vowels that are found in the English language. The class picture chart is the main teaching resource that is used to teach learners to locate the one hundred and twenty keywords (Davies & Ritchie 2003:10).

According to Tomlinson (2007:20) 'Phonemic awareness seems to be the most fundamental building block for healthy reading ability.' THRASS is a whole-school phonics programme that teaches learners about the building blocks that are used when reading and spelling (Wright 2006:19). The Phoneme Location stage in the THRASS programme assists learners who experience difficulties with regards to phonological awareness. According to Trieman (1993, as cited in Davies & Ritchie 2003:12) phonological awareness is essential for young children who require assistance with regards to the reading and spelling difficulties they are faced with. The problem with English, however, is that the correspondence between the graphemes and phonemes is complicated. The 'a' in cat, for example can be pronounced as /æ/ as in 'cat', /ei/ as in 'bake', or /ə/ in the word 'around' (Tomlinson 2007:21). The THRASS picture chart places all letters that sound the same, in the same box. This should eliminate confusion and help the child make the correct spelling choice. The THRASS programme is an intervention strategy that could be used to improve the reading and spelling levels of young learners. It could also be used for English second language learners and help them succeed in a first language environment as they are encouraged to search for the correct spelling choice and write other words that have the same sound.

Many teachers use a blended approach also known as the eclectic or combined approach when teaching phonics to their learners. According to Armbruster, Lehr and Osborn (2001) learning to read is a complex process and in order for all learners

to succeed an integrated approach should be considered. An integrated approach ensures that learners will make sense of what they read in order to comprehend the passage they have read. This means that they will become successful readers as successful readers have a purpose for reading as they are able to think actively as they read which enables them to understand and remember what they have read. Many teachers may find it useful to use the THRASS programme in a classroom situation where many of their learners are learning in a language that is different to their home language.

1.3 ANALYSIS OF THE PROBLEM

1.3.1 Awareness of the problem

On the 8th of September 1999, the then South African Minister of Education, Prof Kader Asmal, announced on the occasion of International Literacy Day that he believed that the functional illiteracy of South Africans could be as high as 40 percent. As a result, in 2001, Prof Kader Asmal, declared that, that year would focus on reading. The reading campaign aimed at building a nation of readers. In South Africa, the topic of reading has been of great interest on the development of language since it has been estimated that 12 million learners will go through the education system per year.

A key concern for all these learners is language. The majority of South African learners do not speak English as their home language, yet the dominant language of learning and teaching (LoLT) is English. According to the Mail and Guardian (2000, as cited in Buchorn-Stoll 2002:25-26) it is imperative for these learners to become fluent in the LoLT as the future of education is dependent upon it. It is evident that South Africa has been struggling since 2001 to implement a programme in schools that will improve the literacy abilities of learners.

South Africa was one of forty countries that participated in the Progress in International Reading Literacy Study (PIRLS) that took place between 2005 and 2006. In May 2005, thirty-eight schools participated in the pilot study. Four hundred and forty-one schools participated in the main study that was conducted in October and November 2005 with the last schools being tested in January 2006. Grade 4 and 5 learners participated in the study. Testing occurred in all eleven official languages.

The Grade 4 and 5 learners' reading in English was also assessed nationally based on the curricula implemented in South African schools. Through the PIRLS assessment it was ascertained that South Africa was the lowest performing country (Howie, Venter, Van Staden, Zimmerman, Long, Du Toit, Scherman & Archer 2008). It thus became necessary for Ms Naledi Pandor, the next Minister of Education, to implement the Foundation for Learning Campaign.

On the 14th of March 2008, Ms Naledi Pandor, the then Minister of Education, published the contents of the Foundation for Learning Campaign in an attempt to improve the Literacy and Numeracy abilities of South African learners. The campaign was launched due to a regional, national and international study (PIRLS) that has indicated that South African children are not reading, writing and counting at the expected levels. The children are also unable to execute tasks that require them to demonstrate key skills that are associated with Literacy and Numeracy (Government Gazette 2008b:4). Clear guidelines have been set out in the Government Gazette Foundations for Learning Campaign as to what tasks teachers are expected to perform during the school day. Teachers have been given the freedom to implement programmes they think are best to achieve the desired results.

Teachers need to implement an approach in order to improve learners' phonological awareness. According to Smith, Simmons, and Kameenui, (1998, as cited in Giambo & Mckinney 2004:97) phonological awareness means that the learner understands that words are made up of units such as syllables, onsets, rhymes, and phonemes (meaningful individual sounds) and it means the learner has the ability to manipulate phonemes in words. According to Wagner, Torgensen, and Rashotte, (1994, as cited in Giambo & Mckinney 2004:97) phonological awareness also means that the learner has the ability to blend (synthesis) and segment (analyse) sounds in the words. One stage found in the THRASS programme is the Phoneme Location stage. This stage is important as it assists learners who have deficits with regards to their phonological awareness. According to Trieman (1993, as cited in Davies & Richie 2003:12) phonological awareness is crucial for young learners as it can provide assistance to learners who are experiencing an ever increasing downward spiral with regards to reading and spelling difficulties that they would not otherwise face. THRASS teaches that at word level, learners are taught that reading is a process

where graphemes are converted to phonemes (that means that reading blends phonemes) and spelling is a process where phonemes are converted to graphemes (that means that spelling segments phonemes). Learners are taught that reading errors occur due to the right grapheme but they have the incorrect phoneme (that means that they have the correct spelling choice but have selected the incorrect sound). Similarly, spelling errors occur when the learner selects the correct phoneme but has selected the incorrect grapheme (that means that the learner has the correct sound but has made the incorrect spelling choice) (Richie & Davies 2003:10). Research has been conducted by numerous researchers, namely, Ball and Blachman (1991); Bradley and Field-Barnsley (1993); Cunningham (1990); Fox and Routh (1984); Tangel and Blachman (1992); Torgesen, Morgan and Davis (1992) (as cited in Giambo & Mckinney 2004:98) on phonological awareness (the learner's ability to use phonemes in words). This research shows that when phonological awareness is taught explicitly to young learners their phonological ability improves and early reading acquisition is improved. Dienes and Perner (1999, as cited in Ritchie & Bhatia 2009:319) define explicit knowledge as '... knowledge that we know that we know and that we are aware of using'. For example, a language learner has to consult a grammar book in order to find the first person singular form of a particular verb (Ritchie & Bhatia 2009:319).

The THRASS programme is a "new phonics" sound system that teaches learners phoneme-grapheme awareness explicitly. The programme teaches learners that English consists of forty-four phonemes (speech sounds) and graphemes (spelling choices). The programme also teaches learners that when we spell we change phonemes into graphemes and when we read we change graphemes into phonemes (Wright 2006:19). No data is available on the reading and spelling levels of English second language learners who have followed the THRASS programme. Therefore, research still needs to be conducted to determine whether the THRASS programme will improve the reading and spelling levels of English second language learners in South African schools.

I am the Institution Level Support Team coordinator and English teacher at an inner city school in Pretoria where most of the learners attending the school are receiving education in a language that is not their home language. It is my job to support

learners with various barriers to learning. The majority of learners I support are experiencing difficulties acquiring the necessary language skills. I see teachers and learners becoming frustrated as there is a communication problem between the two parties. I am also responsible for sending learners to other professionals, such as, speech and language therapists. This can become very expensive to parents whose children also receive occupational therapy and these costs are in addition to school fees. The THRASS programme is possibly an intervention strategy that can be used by teachers in the classroom, as well as by support teachers who see learners individually, to help their second language learners acquire the necessary reading and spelling skills needed in order to succeed in an environment where English is the language of instruction and learning. The proposed study is about helping Grade 2 English second language learners (ESL) succeed in a first language environment using the THRASS programme.

1.3.2 Statement of the problem

Ms Naledi Pandor, the Minister of Primary Education in 2008, published the contents of the Foundation for Learning Campaign due to a regional, national and international study that has indicated that South African children are not reading, writing and counting at the expected levels (Department of Education 2008b:4). It is evident that South African children are not performing according to international levels and need a programme that will improve learners' reading and spelling abilities. The reading and spelling difficulties that are being encountered by many learners in South Africa are being exacerbated by the fact that they are learning through the medium of English, a language that is not their home language. The definition of ESL (English as a second language) is a non-native speaker who uses the English language in an English-speaking environment (Nordquist 2013). South African schools are enrolling more and more learners into their schools where the medium of instruction is English, which is not the home language for many learners, and experience difficulties acquiring the English language due to their limited proficiency (Landsberg, Krüger & Nel 2005:150). Many young learners are faced with two obstacles they need to overcome. They need to master the intricate skill of learning to read and spell while simultaneously learning the language of instruction. I am of the opinion that special measures should be taken into account in order to

assist these learners reach their optimum level of development. One such measure could be to introduce the THRASS methodology.

Thus the following question could be asked:

Could the THRASS methodology be used to improve the reading and spelling abilities of Grade 2 English second language learners?

From the research question the following secondary questions can be deduced:

Will the THRASS methodology improve the reading abilities of Grade 2 English second language learners?

Will the THRASS methodology improve the spelling abilities of Grade 2 English second language learners?

1.4 AIM OF THE RESEARCH

It is proposed that an in-depth study be done to determine whether the THRASS methodology will possibly improve the reading and spelling abilities of Grade 2 learners at an inner city school in Pretoria. The aim of this study would be to gain an understanding of the reading and spelling difficulties experienced by these learners and to determine if the THRASS programme could be used to ensure that these learners overcome their reading and spelling difficulties.

1.4.1 Sub aims

The following sub aims can be found in this research:

- To understand the reading and spelling difficulties experienced by Grade 2 ESL learners.
- To compile a profile of the Grade 2 ESL learner.
- To gain an understanding of the THRASS programme and how it works.
- To determine whether the THRASS methodology could be used to address reading and spelling difficulties encountered by Grade 2 ESL learners.

1.4.2 Specific aims

The specific aim of the research would be to determine whether the THRASS programme can be used to improve the reading and spelling levels of Grade 2 English second language learners.

1.5 RESEARCH METHODS

It has been decided by the researcher to use a group of Grade 2 learners as it will be easier to obtain scholastic test results. Grade 1 learners are not able to read and write at the beginning of the year. This means that it will not be possible to obtain a reading and spelling level which could be compared later. In order to gain a better understanding of the possible influence of the THRASS programme it was decided to conduct the study over a period of two years. Thus two groups of Grade 2 learners consisting of a control group and an experimental group will be used over the two years.

The research methods most suitable to understanding the problems to be investigated will be a quantitative approach as well as a qualitative design. Quantitative research is a research design that selects subjects; data collection techniques that include questionnaires, observations and interviews (McMillan & Schmacher 2001:165).

The data will be collected by means of structured observations and paper and pencil tests (McMillan & Schumacher 2001:40). The quantitative research design will be used to explore a group of Grade 2 English second language learners who are experiencing difficulties reading and spelling. The vast majority of learners are learning in English, a language that is different to their home language. Children who speak English as their first or home language have been omitted from the study. The purpose of the intervention strategy is to determine whether the reading and spelling abilities of Grade 2 English second language learners will improve after the THRASS programme has been implemented and learners have followed the programme for the first three terms of the year.

Two Grade 2 classes will be used in this study. The THRASS programme will be implemented in one Grade 2 class for first three terms. They will be the experiment

group. The other class will be the control group. Their teacher will use any other method in order to teach phonics to her class.

Paper and pencil tests will be conducted at the end of their Grade 1 year. These tests include the one-minute reading test to determine the learners' ability to convert graphemes into phonemes (skills necessary for reading) and the Schonelle Spelling B Test to determine the learners' abilities to convert phonemes into graphemes (skills necessary for spelling). In the one-minute reading test learners are given one minute to read as many words as they can. Any words that have been incorrectly pronounced or omitted are underlined and are not counted at the end. The total number of words read correctly by the learner is counted and a reading level is obtained from the scoring sheet. In the Schonelle Spelling B Test the teacher reads words from the list. The word is read and then used in a sentence. The word is repeated and the learner writes the word down. Once the learner writes seven consecutive words incorrectly, the test is over. The number of words spelt correctly is counted and a spelling level is obtained from the scoring sheet.

At the end of their Grade 2 year the learners will be retested using the one-minute-reading test to determine whether there has been an improvement in their ability to convert graphemes into phonemes (skills necessary for reading). The learners will be retested using the Schonelle Spelling Test B to determine whether there has been an improvement in their ability to convert phonemes into graphemes (skills necessary for spelling).

The scores the learners obtained from the end of the Grade 1 year will be compared to the scores obtained at the end of their Grade 2 year to determine whether the programme assisted them in improving their reading and spelling abilities. The groups will be further compared to see if there is a significant difference between the experiment and control groups.

The research will also include a qualitative design. The qualitative design is an interactive investigation in which the researcher collects data through face-to-face situations whereby the researcher interacts with the selected persons in their environment (McMillan & Schumacher 2001:165).

The qualitative data will be collected by means of structured observations that will be done observing the learners in their natural setting, that is, the classroom while the programme is being implemented. I would like to gain a profound understanding of the difficulties and frustrations the learners experience when they are in a classroom situation where they do not seem to be coping when they are required to read and spell.

Triangulation will be used at the end of the research to verify the results from the quantitative research with the qualitative data. Triangulation has been described by Padgett (1998, as cited in De Vos, Strydom, Fouché & Delport 2005:361) as the convergence of various perspectives in order to supply a greater confidence that what is being researched has been done accurately. Therefore, the idea of triangulation is used to consciously combine quantitative and qualitative methodology.

1.6 DEMARCATION OF THE RESEARCH

It was decided to conduct the research at this particular inner city school as previous research conducted by Du Plessis and Naudé (2003:123) concentrated on the preschools in the inner city of Pretoria. Nine pre-schools were identified in the Pretoria inner city and Sunnyside areas. Their research found that at least 64.5% of the preschools in that demographic area were additional language learners (Du Plessis & Naudé 2003:124). This is an indication of the amount of second language learners who are entering primary schools in the inner city of Pretoria. In addition to the learners receiving education in a language that is not their home language, teachers are also experiencing some difficulties. For example, teachers in government schools have large numbers of learners in their classes (40 learners or more). This means that teachers are not able to dedicate sufficient amounts of time to individual learners who are in need of additional support with regards to acquiring the necessary language skills. Some Afrikaans-speaking teachers or teachers who speak one or more of the African languages are required to teach English literacy skills to second language learners without having adequate knowledge of how to do this (Wright 2006:18).

The research I will conduct will take place at a school in the inner city of Pretoria where the majority of learners are receiving education in a language that is not their home language.

1.7 CLARIFICATION OF CONCEPTS

It is important to clarify the concepts found in this dissertation to ensure that the reader is able to obtain a clear understanding of what is to be investigated.

1.7.1 English second language (ESL) learners

The definition of ESL (English as a second language) is a non-native speaker who uses the English language in an English-speaking environment (Nordquist 2013).

1.7.2 Explicit knowledge

According to Dienes and Perner (1999, as cited in Ritchie & Bhatia 2009:319) explicit knowledge is knowledge that we know and that we are aware of using. For example, a language learner who consults a grammar book in order to find the first person singular form of a particular verb (Ritchie & Bhatia 2009:319).

1.7.3 First Additional Language

The term First Additional Language (FAL) is used in South African schools to describe learners who are learning in a language that is different from their home language or mother tongue (Department of Education 2010:6).

1.7.4 A Grapheme

This refers to the smallest meaning given to a unit of script (Tomlinson 2007:21). For example, the word 'saʹ is represented by the following written symbols: s, a and t.

1.7.5 Home Language

This is the language that is spoken at home. This language is also referred to as the mother tongue. It is assumed that Home Language learners are competent readers, and that they are able to understand and speak the language that has been taken at home language level. The Assessment Standards have been developed so that the learners are able to develop their competencies (Department of Education 2003:20).

1.7.6 Implicit Knowledge

According to Cleeremans, Destrebecqz and Boyer (1998, as cited in Ritchie & Bhatia 2009:319) 'Implicit knowledge can be causally efficacious in the absence of awareness that this knowledge was acquired or that it is currently influencing processing'. For example, a person may be fluent and have a prolific command of their native (home language) and would be able to detect grammatical irregularities, but he or she would not be able to explain the underlying rules (Ritchie & Bhatia 2009:319).

1.7.7 Language Acquisition

This term can be defined as the first stage of becoming competent in communicating in a specific language (Tomlinson 2007:2).

1.7.8 Language Development

Language development is the stage that takes place after language acquisition where language is used successfully for a variety of purposes (Tomlinson 2007:2).

1.7.9 A Phoneme

This is the smallest meaning given to a unit of sound (Tomlinson 2007:21). For example, the word *sat* consists of three phonemes namely: *s*, *a* and *t*.

1.7.10 Phonemic Awareness

Byrne (2005); Gillon (2005); Liberman and Shankweiler (1985); Shaywitz (2003) (cited, in Atwill, Blanchard, Gorin & Burstein 2007:336) describe phonemic awareness as learners' conscious ability to perceive and manipulate the smallest units of meaningful speech namely phonemes.

1.7.11 Phonics

This is the instruction that teaches learners the correspondence between letters and sounds, and how to use these in order to read and spell words (Bald 2007:138).

1.7.12 Phonological Awareness

Smith, Simmons, and Kameenui (1998, as cited in Giambo and Mckinney 2004:97) assert that phonological awareness is an understanding that words consist of units

such as syllables, onsets, rhymes, and phonemes (meaningful individual sounds) and a learner's ability to use phonemes in words.

1.7.13 Reading

Pang, Muaka, Bernhardt and Kamil (2003:6) provide the following definition: 'Reading is about understanding written texts. It is a complex activity that involves both perception and thought. Reading consists of two related processes: word recognition and comprehension'.

1.7.14 Spelling

Spelling can be defined as forming words using letters in accordance with an accepted usage. Spelling is also the sequence of letters that are used in order to compose a word (Merriam-Webster 2013a).

1.7.15 THRASS

'THRASS (Teaching Handwriting Reading And Spelling Skills), is a phonics teaching tool, that has a phonographic, multisensory, approach. THRASS uses a unique, analogous learning model that works 'with' the structure of English, making language acquisition much easier and faster than more conventional approaches, while maintaining linguistic correctness and sustainability'. (THRASS information brochure 2011:5).

1.8 RESEARCH PROGRAMME

The research programme will be outlined as follows:

Chapter 1:

This chapter contains the introduction, analysis of the problem, the aims of the research, research methods, demarcation of the research, clarification of concepts and the research programme.

Chapter 2:

In this chapter the focus will be on the ways learners can be taught reading and spelling skills. The approaches that will be discussed will be the bottom-up approach,

the whole word (or eclectic) approach, THRASS as a whole-picture Keyword Phonics programme and a blended approach to teaching phonics.

Chapter 3:

This chapter will focus on the history of the English language and in so doing clarity will be obtained for the reasons as to why English second language learners encounter difficulties when learning to read and spell. A profile of the Grade 2 as an ESL learner will be compiled.

Chapter 4:

This chapter discusses the quantitative research, qualitative research and triangulation by which the research will be conducted. This chapter also includes the research hypothesis, as well as the methods that will be used to conduct the research. The administration of the One-Minute reading test and the Schonelle Spelling B Test as the research tool will be discussed.

Chapter 5:

In this chapter the research findings will be reported.

Chapter 6:

In this chapter the conclusion to the research will be discussed. The limitations will be identified and recommendations will be made.

1.9 SUMMARY

South Africa is a diverse country where all learners have been given the opportunity to attend schools of their choice. For many learners this means that they are required to receive their learning in a language that is different from their home language or mother tongue. The literature has provided evidence that for many learners this is a mammoth task. A programme that could assist these learners in acquiring the necessary language skills would be to the benefit of many South African learners.

This investigation undertakes to understand reading and spelling difficulties that are being experienced by Grade 2 English second language learners. A profile of the

Grade 2 English second language will be compiled to gain an understanding of the Grade 2 learner. This investigation will also examine THRASS methodology to determine if this programme will be able to assist Grade 2 English second language learners with regards to their reading and spelling difficulties they encounter. The THRASS programme will be examined in order to gain an understanding of how this programme works and if it could be implemented in order to help Grade 2 English second language learners succeed in a First language environment.

It is evident from the results obtained in the Progress in International Reading Literacy Study conducted between 2005 and 2006 (PIRLS) that South African children are in desperate need of a suitable programme that will be able improve their reading and spelling abilities.

The next chapter will focus on the literature that has been written on the different phonics approaches that can be used to teach reading and spelling.

CHAPTER 2

APPROACHES TO TEACH READING AND SPELLING WITH REFERENCE TO PHONICS AND THRASS

2.1 INTRODUCTION

An overview as well as the validation of the study was given in the previous chapter. This chapter will give a profound explanation of the various approaches there are to teaching phonics in an attempt to improve the reading and spelling abilities of Grade 2 English second language learners. This chapter will focus on the various approaches used by specialists in order to teach phonics. These approaches include: the whole-language, bottom-up, combined or eclectic approach and THRASS whole-picture phonics approach.

2.2 THE IMPORTANCE OF PHONICS INSTRUCTION

Writing is used as a code in which speech sounds are broken up into individual sounds that are represented by letters (Stephanie 2009-2012a). Phonics instruction is important as it teaches learners the relationships between the letters of written language (graphemes) and the individual sounds of spoken language (phonemes) (Armbruster, Lehr & Osborn 2001:12).

Phonics instruction is important as it provides learners with tools so that they are able to decode words with ease. The learners may not understand the word or words they are reading especially if the words are found in an unfamiliar language. Phonics instruction is an important building block when teaching learners to read and write, which is making and understanding meaning. When phonics (the ability to decode words) and vocabulary (knowledge of what words mean) are put together, then the learners are on their way to construct meaning of what they read and write (Department of Education 2007:13).

Phonics instruction is pertinent as it teaches learners to recognise the relationships between the letters (graphemes) of written language and their relationships between the individual sounds (phonemes) of spoken language. It teaches learners how to utilise these relationships in order to read and write words. Professionals who are responsible for teaching reading as well as publishers of programmes of beginning

reading instruction use various ways in which these relationships can be described.

These include the following:

- graphophonemic relationships
- letter-sound associations
- letter-sound correspondences
- sound-symbol correspondences
- sound-spellings

(Shriver 2010)

According to Merriam-Webster (2013b) phonics can be described as the science that pertains to sound. It is a method that can be used to teach beginners how to read and to pronounce words by teaching them the phonetic values as they occur in letters, groups of letters and especially in syllables. For example, the word “*hat*” is spelled using three letters, namely, h, a, t, and each letter is represented by a phoneme, /h/, /æ/, and /t/, respectively. It is the main objective of phonics instruction to teach inexperienced readers to comprehend that the letters (graphemes) are associated to a sound (phonemes) where letter-sound correspondences and spelling patterns enable learners to apply their knowledge when reading (National Reading Panel 2011).

The non-supporters of phonics instruction are of the opinion that phonics instruction does not really assist learners when learning to read words as the spellings in English are too irregular. The main objective of phonics instruction, however, is to instill in learners a system that will help them remember how to read words (Armbruster, Lehr & Osborn 2001:12).

2.2.1 The difference between systematic programmes of phonics instruction and non-systematic programmes

Systematic phonics is a clearly defined sequence where a set of letter-sound relationships, both consonants and vowels, are taught. The systematic phonics programme provides the materials so that the learners are given copious amounts of time to practice applying their knowledge of these relationships when they are required to read and write. The materials given to the learners include books or

stories that contain a wide range of words so that the learners can practice decoding by using the letter-sounds relationships they have learned (controlled text) (Sedita 2001:2-3).

Non-systematic phonics programmes do not teach consonant and vowel letter-sound relationships in an arranged sequence. Instead, informal phonics instruction is encouraged and is determined by the teacher's discernments of what the learners need to learn and when they need to learn it (Sedita 2001:2-3).

2.3 KNOWLEDGE NEEDED BY PROFESSIONALS IN ORDER TO TEACH PHONICS

2.3.1 Implicit and Explicit Instruction

According to Cleeremans, Destrebecqz and Boyer (1998, as cited in Ritchie and Bhatia 2009:319) 'Implicit knowledge can be causally efficacious in the absence of awareness that this knowledge was acquired or that it is currently influencing processing'. For example, a person may be fluent and have a prolific command of their native (home language) and would be able to detect grammatical irregularities, but he or she would not be able to explain the underlying rules (Ritchie and Bhatia 2009:319).

Diens and Perner (1999, as cited in Ritchie and Bhatia 2009:319) define explicit knowledge as '...knowledge that we know that we know and that we are aware of using'. For example, a language learner who consults a grammar book in order to find the first person singular form of a particular verb (Ritchie and Bhatia 2009:319).

Ball and Blachman (1991); Bradley and Field-Barnsley (1993); Cunningham (1990); Fox and Rough (1984); Tangle and Blachman (1992); Torgesen, Morgan and Davis (1992) (as cited in Giambo and Mckinney 2004:98) have researched phonological awareness when taught explicitly and found that when this happens phonological abilities are improved which in turn, encourages early reading acquisition.

2.4 APPROACHES USED TO TEACH PHONICS

In the 1970s, the behaviourist theory of reading was developed and it is still prevalent in schools today. This theory ascertains that teachers encourage learners

to learn language by repeating words and sentences or by writing these words or sentences in their workbooks. In order to learn to read, learners are to work systematically through a developed series of isolated skills. Phonics teaches the learners to associate the letters of the alphabet with the sounds they make. Phonics is an example of the behaviourist approach that is used to teach reading skills (Schifferdecker 1999-2011).

This phonics approach could be defined as a “bottom-up” approach as the supporters of this approach maintain that if a learner is able to decode texts correctly, the meaning and understanding of that text will follow. The message is conveyed through the text, while the reader actively decodes the text he or she will discover what the message is (Wren 2003).

There are various phonics methods or phonics approaches that can be used in order to teach learners how to read. A lively debate takes place as to which of the methods is the best to teach phonics, with experts believing vehemently in one approach or another. In reality, each approach has shown success to some degree (Stephanie 2009-2012).

2.4.1 Synthetic phonics

The English language comprises of more than forty phonic sounds. These are the individual sounds that are used to form words. Each of the sounds is symbolised by grouping the 26 letters of the alphabet. It is the objective of synthetic phonics to systematically teach each of the sounds and letters that are used to represent them. (Stephanie 2009-2012b). In synthetic phonics learners are taught to ‘synthesise’ (that is, to put together or build up) pronunciations for unfamiliar written words by converting letters into sounds and thereby blending the sounds together. Therefore, synthesising is synonymous with blending (Stephanie 2009-2012b).

Synthetic phonics enables the reader to recover and put together information that has been set down using the alphabetic system. The alphabetic system is used to represent the sounds, when writing, what would otherwise be said. The synthetic phonics teaching scheme would have the following points:

- The letter-sounds relationships are taught in a defined sequence.

- The children would be exposed to short but paced lessons on a daily basis.
- This primary programme would take a little over a term to complete.
- The children are taught how to blend sounds in order to make words and are given opportunities to practice this.
- The children are taught to read and spell simultaneously.
- Teaching resources include songs, games and actions.
- Teaching also provides opportunities for language development to take place. (Bald 2007:6).

Synthetic phonics has been shown to be predominantly suitable at the commencement of the learners' schooling, as this is the time when learners are faced with an abundant amount of unacquainted words. They are in need of an elementary and unambiguous introduction to the underlying principle of alphabetic writing: written symbols that are represented by individual speech-sounds (Chew 2005).

The English language writing system is alphabetic and therefore novice readers must be taught how the letters of the alphabet, individually or in combination, represent the sounds of spoken language (letter-sound correspondences) and how to blend (synthesise) the sounds in order to read words, and how to break up (segment) the sounds in order to spell words. Furthermore, learners should be taught to process all the letters in words and thereby read words both found in and out of text. Phonic work that teaches these skills and knowledge should be done in a well-defined and systematic sequence (Rose 2006:19).

It is generally accepted that it is more challenging to learn to read and write in English as the relationships between the sounds and the letters are more complex than in other alphabetic languages. Therefore, it is essential to teach phonic work systematically, regularly and explicitly, because the learners are highly improbable to work this relationship out for themselves (Rose 2006:19-20).

Challenges learners are faced with when learning to read and write in English include the following:

- A significant number of words found in the English language are based on foreign sound systems, such as the French sound system. Words like: croquette, egalitarian, escargot and quiche, to name a few (Merriam-Webster 2008).
- Pronunciations of words have been altered over time.
- There are various ways in which the same and similar sounds can be represented.
- Shortcuts in everyday speech often make it difficult for the learner to hear all the sounds in the word clearly.
(Bald 2007:57).

The English language consists of more than forty phonic sounds, with sounds being represented by a total of 26 letters. Sounds can be represented by one letter (e.g. 'c' in the word 'cap') to four letters (e.g. 'eigh' in the word 'eight'). Nearly every sound has more than one way in which it can be spelt. In the beginning, learners are taught one spelling for each sound, where they blend words with them and learn the spelling alternatives afterwards. The learners are not supposed to guess words by their shape, picture or context clues (Stephanie 2009-2012a).

The THRASS Whole-Picture Keyword Phonics programme incorporates the use of synthetic phonics by introducing the learners to the part-to-whole word learning first. This is done during the Keyword Synthesis stage, which can be found in stage 7 (section 2.6.3.7) of the phonics programme (Davies & Ritchie 2003:11).

2.4.1.1 Controversial points to synthetic phonics

Synthetic phonics has been criticised due to the following disadvantages:

- This method increases the speed at which learners are able to read words, but it does not assist learners' comprehension of what the words mean (Stephanie 2009-2012b).
- Irregular words are taught separately and the irregularities found in words are not explained. Learners are taught that irregular words are known as 'sight words'. The teacher does not explain why some words are irregular and the reason why phonics does not always work (Bald 2007:8).

- Learners are not able to constantly sound out each word. It is vital that the learners are able to recognise whole words which will improve their fluency which in turn will develop their comprehension of the words found in the text. The learners will also develop an appreciation of the text once these two factors are in place (Stephanie 2009-2012b).
- The delay in introducing books to learners has been criticized but there does not seem to be a problem with this if the teacher makes sure that the language-rich curriculum is properly understood by all his or her learners. Language activities that include the telling of the stories, rhymes and short texts form part of many modern phonic schemes. Teachers who introduce learners to books from the beginning should take care to explain to the learners that words do not always work as we expect them to. Learners should also not become confused when they encounter an irregular word (Bald 2007:8).

2.4.2 Analytic phonics

When using the analytic phonics programme, the learners will be taught to analyse and break down the various components and corresponding sounds that make up a word. The learners will be required to recognise the relationships between the components. The learners will then be required to use these relationships between the components and sounds so that they will be able to understand how to read other words that consist of similar components. The emphasis of this programme is on the shape of words, the initial and final letters of the words as well as the sounds (or phonemes) of the various components (Heuberger 1999-2011).

The first step in this approach is to teach the learners the names of the letters and the sounds that they make. Then the learners are taught how to blend letters together in order to make simple words. Words that are spelt in a similar way are taught together in 'rhyming families'. The learners are then taught to analyse whole words where they are able to identify the spelling patterns from the rhyming families they were taught. This should assist the learners when they are required to read new words (Stephanie 2009-2012a).

It is believed that analytic phonics should only be introduced to the learners once the learners have mastered synthetic phonics and only once the learners have mastered the skill of reading words in a left to right sequence. The left to right reading sequence is mastered by ALWAYS starting “at the beginning of the word” and then proceeding to read the word all the way through to the end. Analytic phonics will enable the learners to do two things if it is included into a reading programme at the appropriate time:

- 1) The learners will be able to identify common word families in a set of words.

For example: cat fat rat

land band sand

sink blink pink

- 2) The learners will be able to divide a word into its individual phonemes. It is essential that analytic phonics follow synthetic phonics since learners without the skill of synthetic phonics will experience anxiety when faced with a new word as they will notice that there are pieces within the word that are unfamiliar to them and therefore will not have the “synthetic” skills needed in order to “sound out” the unfamiliar parts (Candy 4WAY Phonics Publications 2008).

We are aware that synthetic phonics does not always work, and it is at this point that analytic phonics could be useful. This can be demonstrated by the following example: words such as *knee*, *knew*, *knit* as well as the words *whistle*, *white*, *which* show that the initial silent letter is always followed by the same letter. This is a regular occurrence which means that the two letters could be considered to form a phonic group; in the same way as the *qu*. Analytical phonics thus enables the learner to learn a considerable amount of common words that require modifying our regular interpretation of letter sounds (Bald 2007:9).

It is clear from the above given examples that analytical phonics cannot be excluded from the teaching of reading in English. Once the irregular patterns in words have been established, the learner still has to blend them with the regular words in order to read (Bald 2007:9).

The THRASS Whole-Picture Keyword Phonics programme incorporates the use of analytic phonics when the learners progress to the interactive whole-to-part word learning. This is done during the Keyword Analysis stage, which can be found in stage 9 (section 2.6.3.9) of the phonics programme (Davies & Ritchie 2003:11).

2.4.3 Systematic phonics approach

In the systematic, explicit phonics programmes the emphasis is placed on the associations that take place between the letters that are used to express written words and the sounds that are used when speaking as they transpire in an identifiable sequence. The learners are first taught parts of words and then eventually they build towards whole words as they appear in a logical, sequential way. The emphasis of this programme is more to do with basal reading than on individual books. The learners develop their reading skills first and then they move on to the meaning of the words. This programme also emphasises the proper identification of letters and sounds as well as automaticity. Automaticity is the ability to recognise words quickly and automatically. The learners' demonstration of their performance is determined by standardised test results. This form of phonics instruction is most effective when it is introduced in the early years of instruction where the learners are able to develop their decoding skills and where their ability to understand letter-sound relationships is reinforced. This programme is more effective when it combines the development of comprehension skills and where rich literature is used to aid the learners in their understanding of the relationship of decoding skills as well as interpreting the meaning of the words that they have read (Teele 2004:53).

2.4.4 Analogy-based phonics

Analogy-based phonics can be thought of as a type of analytical phonic (Rowlingson 2006-2011). This approach to phonics provides the learners with analogies of known words to unknown words. This is done through association of rhyming words. The learners are taught how to use the parts of word families that they are familiar with in order to identify words that are unfamiliar to them (Teele 2004:53). The method used in this phonics allows the learners to use parts of word families in order to decode words they are unfamiliar with by identifying the parts of the words that have similarities and that are familiar to them. For example, the learners are able to

use their pre knowledge of the word 'green' in order to help them read the word 'screen' (Tolbert 1999-2011).

2.4.5 Embedded phonics

This phonics approach is not used systematically, instead it is used in 'teachable moments' as they would arise. This means, as soon as an individual learner or group of learners have been identified as having a problem with a particular sound or word. The teacher may even stop reading in order to teach the learners the word or the sound. The approach is used in conjunction with the whole language approach (Rowlingson 2006-2011).

In this phonics approach, the learners learn letter-sound relationships through explicit instruction while they read printed media. This approach also uses sight word reading in order to teach letter-sound relationships (Tolbert 1999-2011).

2.4.6 Phonics-Through spelling

The phonics-through spelling approach teaches learners to slip words into component sounds, or phonemes, and then how to associate the written letters with the phonemes (Education.com 2006-2011). This approach teaches the learners how to segment words into phonemes and how words can be spelt phonemically (Teele 2004:54).

2.4.7 Onset/rimes phonics

In this method, the learners are taught to sound out the word (Tolbert 1999-2011). This approach teaches the learners to identify the sounds of the letters before the first vowel. This is known as the onset. The remaining sounds of the word are known as the rhyme (Teele 2004:54). The learner then blends the two together in order to create the word (Tolbert 1999-2011).

Onset-rimes consist of two parts. The beginning sound that can be heard when the word is sounded out, is known as the onset. The part of the word that is left once the onset has been removed is known as the rime. The onset-rime segmentation becomes two parts once they have been separated (Moreland 1999-2011).

2.5 THE WHOLE-LANGUAGE APPROACH

The whole language phonics approach to teaching reading and writing accentuates learning whole words and phrases instead of learning words through phonics activities (Merriam-Webster 2013c). This approach is based on the constructivist learning theory.

The constructivism theory is based on observation and scientific study as to how people learn. The constructivists are of the opinion that learners are to construct their own understanding and knowledge of their world by the experiences they have as well as thinking about those experiences. As learners stumble across new concepts, they have to reconcile it with previous ideas and experiences, whereby they might need to alter what they believe or perhaps discard the new information as being irrelevant. It is believed by the constructivists that we are active creators of our own knowledge. In order to do this we are required to ask questions, explore and assess what we already know (Wilson & Liepolt 2004).

Teachers who use the whole language approach to teach learners to read emphasise that the meanings and strategies used in order to understand language as system of parts that work together in order to create meaning. The emphasis is also placed on learners to recognise core words as a whole word, instead of sounding the words out phonetically. Literature is used as the teaching tool that aims to incorporate literacy with all other learning areas that form part of the curriculum. The learners are required to use reading and spelling for everyday purposes instead of just learning to read and write for the sake of it (Morin 2013).

The alphabetic system is a mnemonic method that is used in order to support our memories for specific words. In other words, once a learner has learnt that the correct spelling for the word is phone, rather than the phonetic spelling foan, the learner's memory will help him or her when required to read, spell and recognise words instantaneously and more accurately than he or she could read the word foan. The same process can be used for words that have an irregular spelling. Some irregular words contain some regular letter-sound relationships that enable learners to remember how to read them (Armbruster, Lehr & Osborn 2001:12).

The proposers of this approach are of the opinion that all learners learn to read naturally, just as they are able to learn to walk and talk. They believe that by immersing learners in good books, good and capable readers will be produced (Stephanie 2009-2012a).

Thompson and Nicholson (1999, as cited in Teele 2004:54) assert that the literature-based, whole-language approach teaches the learners to understand the meanings of words first before they are taught decoding skills (this is found in the phonics approach). The learners read the story first and then the vocabulary development of the story is discussed. In this approach rich literature is encouraged more than the basal readers. The approach is learner-centered where the emphasis is placed on natural learning and where written language is closely related to the learners' spoken language.

The learners are introduced to interesting and fun books in the hope that they will be motivated to read, in order to memorise the many words that they will encounter whilst reading (Stephanie 2009-2012a).

This approach also emphasises the relationship between reading and writing. It focuses on integrating language arts with a literature-based curriculum and it focuses on linking reading to comprehension. Teachers who opt to use this approach include word recognition programmes as well as phonics as a tool to assist their teaching but their focus is on understanding and comprehending the meaning of words as they are related to the text (Teale 2004:54).

2.5.1 Look and Say or Whole Word approach

The German word for 'configuration' is Gestalt. A school of psychology that was developed in Germany at the beginning of the twentieth century was later referred to as 'Gestalt psychology'. The premise of this theory was built on the fact that the followers of this theory were of the opinion that the human brain tended to consolidate experience into patterned configurations or wholes. The term 'Gestalt' was used when referring to the whole of perceptions or thought processes as opposed to the individual items contained within it. The Gestalt psychologists infiltrated the education sector by inspiring teachers to channel their learners'

attention on the whole (the Gestalt) as opposed to the parts. In teaching learners to read it supported the 'look and say' or looking at whole sentences rather than using the phonics methods and programmes of reading (Gordon & Lawton 2003:104).

In this approach, the learners are taught to read words through pattern recognition or the form of the word as opposed to decoding the letters found in the word. Individual words are displayed on flashcards, sometimes with accompanying pictures, in order for the learners to commit the pattern of the word to memory. In so doing, the learner will build up an extensive 'sight vocabulary' – words that can be recognised on sight (Stephanie 2009-2012a).

2.5.2 The combined or eclectic approach

Some reading programmes suggest that a combination of phonics and whole language be taught, but not simultaneously. Proposers of these programmes are of the opinion that phonics should '...be taught separately, directly, and systematically to ...' (Stephanie 2009-2012a) learners, and not within the framework of the reading literature. They are also of the opinion that learners should be encouraged to experience good literature by reading out loud, have discussions about the stories they have read, as well introduce new knowledge and vocabulary. Learners should be given the opportunity to practice the phonics they have learnt on a daily basis so that they will become accomplished readers (Stephanie 2009-2012a).

2.6 THRASS

2.6.1 Introduction

THRASS introduces learners to a "new phonics" where the units of the programme consist of the forty four phonemes (speech sounds) and the one-hundred-and – twenty key-graphemes (spelling choices) that are found in the English language. The "old phonics" was found to be an artificial and restrictive phonics programme which taught "letter sounds" (Davies & Ritchie 2003:8).

Alan Davies used the International Phonetic Alphabet to conceive the philosophy and methodology of the THRASS (**T**eaching **H**andwriting **R**eading **A**nd **S**pelling **S**kills) programme. His original work had been sent to the publishers in England in 1989. In 1992 and 1994 the first phonographic charts and resources for the THRASS

programme were published. Davies is a British chartered educational psychologist, a former teacher and teacher trainer, and is an associate fellow of the British Psychological Society. (His qualifications include: Dyslexia Institute Diploma and the British Dyslexia Association Diploma). Denyse Ritchie joined Davies in his venture in 1995. Denyse Ritchie is a Western Australian author, publisher, former teacher and teacher trainer. The resources (audio, magnetic, printed, software and video resources) that are currently in use have been created and designed by, Davies and Ritchie, as well as the professional development courses. Their work is a result of their interaction with the thousands of children, adults and teachers across the UK, Europe and Australia (Davies & Ritchie 2003:3).

The following information has been taken from the teachers training manual: *Teaching THRASS: whole-picture keyword phonics: the essential guide to progression and assessment for all teachers of English* (Davies & Ritchie 2003).

2.6.2 The main distinguishing features of the THRASS programme

The THRASS programme consists of the following ten distinguishing features:

- 1) The integral pictures and keywords on the 'whole-picture' charts are used to teach the learners the essential listening and speaking skills from the start. No separate resources or programmes are used.
- 2) The essential elements that make up the programme are the forty-four phonemes (speech sounds) and the one-hundred-and-twenty key-graphemes (spelling choices) of English. It does not include the restrictive 'letter sounds' found in the "Old Phonics" programmes.
- 3) The learners are taught from the start that lower-case and capital letters are always identified by name. This is a skill that is expected of good spellers, and readers.
- 4) Teachers are able to use words commonly found in the environment (for example names of people, places and products) in order to teach the learners the forty-four phonemes as well as their graphemes.
- 5) The success of the programme does not rely on learners having to ignore any previous knowledge they have acquired through other phonics programmes such as, when we read each lower-case letter has a specific sound, and

when we spell, each sound has a specific lower-case letter. The learners also do not have to ignore any associated actions, or alliterative characters they have been taught and or any explanations they have received with regards to why words are spelt or pronounced in a particular way, for instance, magic “e”, silent letters, soft or hard letters, tricky or irregular.

- 6) Teachers continually refer to the pictures, letters, keywords and phoneme-boxes and key-graphemes that are presented on the individual and or class ‘whole-picture’ charts in order to teach speaking and listening skills, to teach sequential skills, to teach word synthesis skills (part-to-whole) as well as to teach word analysis skills (whole-to-part).
- 7) The outcomes of the sub-stages and stages are assessed by using criterion-referenced tests (these tests have an observable standard of achievement).
- 8) The programme is cross-curricular in that words from different subject areas can be taught by making use of phonographic comparisons from the start.
- 9) The programme also teaches Phonographic Metacognition which means that the learners acquire life-long word solving skills. This can only be done if all the teachers teach learners by using the same terminology and if all teachers continuously refer to ‘whole picture’ charts where they make use of the pictures, keywords and key-graphemes.
- 10) The programme is suitable for learners of all ages and abilities.
(Davies & Ritchie 2003:9).

2.6.3 The ten stages to follow when teaching THRASS

2.6.3.1 Stage 1: Picture Location

During this stage the learners are taught to locate and name the one-hundred-and-twenty outline pictures that are found on the class picture chart.

The learners start with the first sixteen pictures found in the Consonant Row 1 (C1). The learners are taught using the Raps and Sequence Book as well as the individual Picture-chart. The learners are taught to point directly below the picture, using their index finger, while naming it. The pictures should be named from left to right in a sequential order.

Once the learners have shown, through an assessment process that they have mastered the first row (C1) then they would move on the next row (C2). Once this row has been mastered they move on to the next row (C3). Once this row has been mastered they would move on the last consonant row (C4). As soon as the learners have shown that they have are able to name and locate all the consonant pictures they then move on the vowel section of the chart.

The vowels are taught in the same way as the consonants. They would start with the first vowel row (V1). Once the first row has been mastered they would move on to the next row (V2). Once this row has been mastered they would move on to the next row (V3). The last vowel row they would have to master is V4. The learners would have to demonstrate that they are competent in locating and naming all the consonant and vowel pictures before they would be allowed to progress to the next stage (Davies & Ritchie 2003:24).

2.6.3.2 Stage 2: Letter Location

During this stage the learners are taught to locate and name the twenty-six lower-case letters located in the Letter-Boxes found at the top of the Grapheme-chart.

The learners are taught to point their index finger directly underneath the letters while naming it. Once the learners are able to name and locate all the lower-case letters during an assessment process, they then move on the capital letters. As soon the learners show that they are competent in naming and locating all the lower-case and capital letters located in the Letter-Box, they are then ready to progress to the next stage (Davies & Ritchie 2003:32).

2.6.3.3 Stage 3: Letter Formation

During this stage the learners are taught to name and correctly form the twenty-six lower-case letters found in the Letter-Boxes located at the top of the class Grapheme-chart. The learners are taught to correctly form the letters by tracing over the letters on the class Grapheme-chart. Once the learners have shown that they are able to write all the lower-case letters then move on to the capital letters.

The capital letters are taught in the same way as the lower-case letters. The learners trace over the capital letters found in the Letter-Boxes located at the top of the class

Grapheme-chart. Once the learners have shown that they are competent in correctly forming all the lower-case and capital letters they are then ready to move on to the next stage (Davies & Ritchie 2003:38).

2.6.3.4 Stage 4: Grapheme Location

During this stage the learners are taught to name and locate all the consonant and vowel graphs, digraphs and trigraphs using the Grapheme-chart.

The teacher would start by teaching the learners where to locate and how to name the six bold graphs (one-letter-spelling choices) in the Consonant Row 4 (C4). The learners then move on to the ten digraphs (two-letter-spelling choices) found in Consonant Row 3 (C3) and finally the one trigraph (three-letter-spelling choices) found in Consonant Row 2 (C2). The learners are taught to use their index finger and to point directly underneath the bold 'test' graphemes and use the words 'graph', 'digraph' or 'trigraph'.

Through an assessment process it will be determined whether the learners are able to name and locate all the consonant graphs found in C4. The learners will then be assessed on consonant digraphs found in C3. Finally the learners will be assessed on the consonant trigraphs found in C2. Once the learners are able to name and the entire group of consonant graphs, digraphs and trigraphs, they then move on the vowel section.

The vowels are taught in the same way as the consonants. The teacher would start teaching the learners where to locate and how to name the vowel graphs, digraphs, split digraphs and trigraphs. Once the learners show that they are competent in naming and locating all the consonant and vowel graphs, digraphs, and trigraphs they are then ready to progress to the next stage (Davies & Ritchie 2003:44).

2.6.3.5 Stage 5: Keyword Location

During this stage the learners are taught to name and locate the one-hundred-and-twenty keywords found on the class Picture-chart.

The learners start off by locating and naming the sixteen keywords found in Consonant Row 1 (C1). The learners are taught to point with their index finger underneath the keyword while naming it.

Through an assessment process the learners are assessed on their ability to name and locate the sixteen keywords founds in C1. Once the learners show they are competent in doing this, they then proceed to C2. As soon as learners show that they are competent in doing this, they then proceed to C3 and then to C4.

Once the learners show that they are competent in naming and locating the one-hundred-and-twenty keywords they then move on the sixty 'Vowel Keywords'. The vowel keywords are taught in the same manner as the consonants. The learners start with the first row of vowels V1. Once the learners show they are competent in locating and naming the vowel keywords in that row, they then move on to V2. The second vowel row is followed by V3 and finally they move on to V4.

The learners have to show that they are competent in naming and locating all the consonant and vowel keywords before they progress to the next stage (Davies & Ritchie 2003:50).

2.6.3.6 Stage 6: Phoneme Location

During this stage the learners are taught to locate as well as articulate the twenty-four consonant phonemes and the twenty vowel phonemes. The learners would use the bold key-graphemes located on the class Grapheme-chart.

The learners start off by locating and articulating the six consonants phonemes in Consonant Row 1 (C1) using either the class or the individual Picture-chart, Phoneme-Grapheme cards as well as the Raps and Sequences Book. The learners are taught to point underneath each phoneme-box using their index finger as they locate and articulate each phoneme.

Through an assessment process the learners are assessed on their ability to locate and articulate the six consonant phonemes founds in C1. Once the learners show

they are competent in doing this, they then proceed to C2. As soon as learners show that they are competent in doing this, they then proceed to C3 and then to C4.

Once the learners show that they are competent in locating and articulating the twenty-four consonant phonemes they then move on to the twenty vowel phonemes. The vowel phonemes are taught in the same manner as the consonants. The learners start with the first row of vowels V1. Once the learners show they are competent in naming and articulating the vowel phonemes in that row, they then move on to V2. The second vowel row is followed by V3 and finally they move on to V4.

The learners have to show that they are competent in locating and articulating all the consonant and vowel phonemes before they progress to the next stage (Davies & Ritchie 2003:56).

2.6.3.7 Stage 7: Keyword Synthesis

During this stage, the learners use the Phoneme-Grapheme Tape in order to help them blend, read and spell the one-hundred and twenty keywords found in the Phoneme-Grapheme book.

The learners start off by blending, reading and spelling the sixteen keywords in the Consonant Row 1 (C1). The learners say the phonemes, words and letters out loud while listening to the Phoneme-Grapheme Tape. The learners use their index finger to point directly underneath the graphemes and phonemes as they say them.

The assessment will determine whether the learners are able to blend, read and spell each keyword in the Consonant Row 1 (C1) while listening to the Phoneme-Grapheme Tape soundtrack. Once the learners show they are competent in doing this, they then proceed to C2. As soon as the learners show they are competent in doing this, they then proceed to C3 and end with C4.

The learners need to be competent in blending, reading and spelling all the consonant keywords before they commence with the sixty Vowel Keywords. The learners are taught to blend, read and spell the vowel keywords in the same way as

the consonants. The learners start with Vowel Row (V1) first. As soon as the learners show that they are competent in blending, reading and spelling the vowel keywords in Vowel Row 1 (V1), they then move on to Vowel Row (V2). As soon as the learners show that they have mastered V2, they then move on to V3. The learners then move on to V4.

The learners have to show that they are competent in blending, reading and spelling all the consonant and vowel keywords before they progress to the next stage (Davies & Ritchie 2003:64).

2.6.3.8 Stage 8: Key-grapheme Recall

During this stage the learners are required to visualise and spell from memory and in sequential order the one-hundred-and twenty key-graphemes.

The learners use the Grapheme-chart in order to visualise and spell the sixteen key-graphemes in Consonant Row 1 (C1) from memory and in sequential order. The learners use the Overwrite chart so that they are able to overwrite and name the key-grapheme while remembering the associated keywords. The learners use the outline pictures located on the individual or class Picture-chart, they use the colour Phoneme-Grapheme Cards and they also use clues, props and mimes. The learners should be encouraged to overwrite the key-graphemes that they have difficulties remembering so that they will be able to develop a visual image of the letter or letters. The learners will do this until they are able to (i) point underneath each key-grapheme found on the Overwrite Chart (or Grapheme-chart) and name the picture associated with the key-grapheme. The learners must also (ii) be able to name the letters found in the sixteen graphemes and (iii) be able to name the associated pictures in a left-to-right sequential order without needing to look at the Overwrite Chart or the class Grapheme-chart.

The formal assessment will determine whether the learners are able to visualise and spell the sixteen key-graphemes (by forming the printed letters correctly) in Consonant Row (C1) of the class Grapheme-chart. The learners use the Consonant Say, Name and Write Sheet or the Combined Say, Name and Write Sheet when writing the graphemes. The learners are then asked to recall the associated

keywords. The learners have to recall the keywords loudly and clearly by first visualising the key-grapheme and then being able to recall the associated keyword.

As soon as the learners show that they are competent in visualising and spelling the sixteen key-graphemes in Consonant Row 1 (C1) they then move on to Consonant Row 2 (C2). This procedure is repeated for rows C3 and C4.

The learners need to be competent in visualising and spelling all the consonant key-graphemes and keywords before they commence with the sixty Vowel Key-graphemes. The learners are taught to visualise and spell the vowel key-graphemes in the same way as the consonants. The learners start with Vowel Row (V1) first. As soon as the learners show that they are competent in visualising and spelling the vowel key-graphemes in Vowel Row 1 (V1), they then move on to Vowel Row (V2). This procedure is repeated for rows V3 and V4.

The learners have to show that they are competent in visualising and spelling all the consonant and vowel key-graphemes before they progress to the next stage (Davies & Ritchie 2003:72).

2.6.3.9 Stage 9: Keyword Analysis

During this stage the learners are taught to read, spell and analyse the one-hundred-and twenty keywords.

The learners start by reading, spelling and analysing the sixteen keywords found in Consonant Row 1 (C1). The learners use the class Picture-chart, and they use the printed graphemes found on the Phoneme-Grapheme Cards. The learners are required to say the keywords loud and clear, they are required to say the keywords and names loud and clear as well correctly form the letters as well as segmenting the words with ease. These steps should be followed in this order.

The learners show that they are competent in reading, spelling and analysing the sixteen keywords found in Consonant Row 1 (C1) when they are able to point directly underneath each keyword, using C1 of the THRASS Keyword Reading Test C, name it, spell it, using the outline pictures in the THRASS Keyword Spelling Test

C (without hearing the word first), and then they should be able to analyse and segment the graphemes, using the THRASS Keyword Analysis Test C, respectively. The learners then move on to row C2, C3 and finally C4.

As soon as the learners show that they are competent in reading, spelling and analysing all keywords found in the consonant rows they then begin reading, spelling and analysing the keywords found in the vowel rows. The vowels are taught in the same way as the consonants, starting with the Vowel Keywords in Vowel Row 1 (V1).

The learners use the THRASS Keyword Reading Test C, THRASS Keyword Spelling Test C and THRASS Keyword Analysis Test C, respectively in order to demonstrate that they are competent in reading, spelling and analysing the vowel keywords found in Vowel Keyword Row 1 (V1). As soon as the learners show that they are competent in reading, spelling and analysing the vowel keywords in V1 they then move on to V2. The learners then move on to V3 and end with V4.

The learners have to show that they are competent in reading, spelling and analysing all the consonant and vowel keywords before they progress to the next stage (Davies & Ritchie 2003:78).

2.6.3.10 Stage 10: THRASS 500 Tests

During this stage the learners are taught to read and spell the five-hundred base-words.

The learners start by learning to read and spell the 30 two-letter base-words.

A formal assessment is conducted to determine whether the learners are able to point with their index finger directly underneath the two-letter base-words found in the THRASS 500 Reading Test. The learners are required to read the words from left-to-right in sequential order. The learners are also required to be able to spell the same words using the THRASS 500 Spelling Test.

As soon as the learners show that they are competent in reading and spelling the 30 two-letter base-words they then move on to the 85 three-letter base-words. The assessment takes place in the same manner as the 30 two-letter base-words. As soon as the learners show that they are competent in reading and spelling the 85 three-letter base-words, they then move on to the 160 four-letter base-words. The assessment for the 160 four-letter base-words takes place in the same way as the 30 two-letter and 85 three-letter base-words. As soon as the learners show that they are competent in reading and spelling the 85 three-letter base-words, they then move on to the 108 five-letter base-words. The assessment for the 108 five-letter base-words takes place in the same way as the 30 two-letter, 85 three-letter and 160 four-letter base-words. As soon as the learners show that they are competent in reading and spelling the 108 five-letter base-words, they then move on to the 65 six-letter base-words. As soon as the learners show that they are competent in reading and spelling the 65 six-letter base-words, they then move on to the 27 seven-letter base-words.

During the previous stages the learners would have been exposed to the five-hundred base-words. The learners would have discovered many of the two-, three-, four-, five- and even the six-letter base-words. These words would already be familiar to learners in terms of reading, spelling and analysing them. This stage will enable the teacher to determine whether the Phonographic Metacognition of the previous stages has been applied by the learners, individually or the class as a whole, to both familiar as well as unfamiliar words (Davies & Ritchie 2003:86).

2.6.3.11 THRASS resources

The THRASS programme consists of an extensive use of resources. The resources will be mentioned in this section. It is imperative that the user attends the two day training course in order to use the resources effectively. The list of resources can be found in the teachers training manual: *Teaching THRASS: whole-picture keyword phonics: the essential guide to progression and assessment for all teachers of English* (Davies & Ritchie 2003). The user is also advised which resources to use and with which stage. The following resources are available to the user:

Books

English Phonics Book
English Phonics 500 Book
Sing-A-Long Book
Spelling List Workbook
THRASS Dictionary

Deskcharts

English Phonics Chart
English Phonics Check
English Phonics Keyword Codes
English Phonics Overwrite Charts (A4 and A5)
English Phonics 500 Chart
English Phonics 1200 Chart
English Phonics Time Awareness Chart

Wallcharts

English Phonics Charts (A3, A1 and A0)
Catch-All Spellings Chart
THRASS Graphemechart

Cards and Tiles

Picture Cards
Magnetic Graphemes
Phoneme-Grapheme Cards

CDs and DVD

Sing-A-Long CD
Move-A-Long with Sing-A-Long DVD
Raps And Sequences CD

Software

THRASS-IT window software (available for single PC, PC server)
Sing-A-Long software (available for single PC and PC server)

Sound it out software (available for single PC and PC server)

Phoneme machine software (available for single PC, for single Mac and PC server)

The phoneme machine is a free of charge software that uses the 500 basewords in order to teach learners the 44 sounds (phonemes) and the main 120 spelling choices that pertain to the English language. The phoneme machine makes use of human lips in order to pronounce the sounds (phonemes) that occur in hundreds of frequently used words in English (Davies & Ritchie 2003:22)

2.6.3.12 My THRASS experience

I have been using the THRASS programme in my Literacy class of Grade 2 English second language learners for the past two years. I can honestly say the learners enjoyed all the lessons and could not wait for the next lesson!

The lessons concentrated on the vowel sounds as they are the most difficult sounds to learn in English. These sounds are irregular and change all the time. The sounds are not consistent and there may be more than one way of saying and writing them. Consonant sounds are more constant but can also be irregular from time to time. The irregular consonants were also dealt with in the lessons.

The learners started the year off by revising all the short vowel sounds. The learners were introduced to the term 'graph' which refers to a single letter making a single sound. For example the word 'rat' consists of three graphs. The 'r', 'a' and 't'. The learners learnt the term quickly and soon they were able to say what a graph was as well as provide examples of letters that are considered to be graphs in words. The main emphasis of the word, however, was placed on the short vowel found in the middle of words.

The learners then proceeded to learn long vowel sounds that consisted of digraphs, trigraphs and quadgraphs. Once again the learners became proficient in using the terms interchangeably; they were able to provide examples as well identify sounds that would best fit each of the terms.

I found it easy to follow the grade plan as to which sounds were to be introduced during the year. I could easily use the materials that were given by the grade head and at the same time using the THRASS programme methodology to introduce the sounds and reinforce spelling rules. The THRASS programme provided an exciting lesson and the learners showed their enthusiasm about learning phonics and how to apply the knowledge they had learnt.

The learners who had progressed to the next grade were still using the terms they had learnt and they were using their knowledge they had learnt when faced with new sounds. The learners showed that they had become competent spellers in that they were able to spell both familiar and unfamiliar words.

2.6.3.13 THRASS around the world

Many countries around the world have been introduced to the THRASS synthetic phonics programme. There are many schools across Asia, the Caribbean, Africa, the USA, Europe and the Middle East that are using the THRASS programme and attaining unquestionable achievements when teaching learners, of all ages, reading and spelling skills. The latest example of the THRASS success can be found at a Western Primary School in Harrogate, North Yorkshire, England (Griffiths 2008c).

The school first implemented the THRASS programme to assist learners with special education needs (SEN) but the success levels attained by these learners was so remarkable and the learners enjoyed the programme so much that the head teacher, Cheryl Smith, decided to extend the THRASS experience to the entire school. The youngest learners of the school were also introduced to the THRASS experience (Griffiths 2008c).

Zara Chantler, the teacher who initiated the THRASS programme at the school and SEN Coordinator explained, 'The children have already made a huge amount of progress even with the small amount of THRASS they have had so far. Their spelling has improved, and their general literacy vocabulary has improved immensely' (Griffiths 2008c).

THRASS is currently being used in schools by children in mainstream and by children who experience barriers to learning across the Caribbean. The programme is receiving extremely favourable reviews there that the Barbadian Government's National Policy on the Teaching of Reading would like to achieve the following reading goals using THRASS. Firstly, they intend to consistently improve the quality of reading instruction children are receiving within the school system. Secondly, they plan to initiate additional interventions for individual children who experience reading barriers. Thirdly, they aim for children to develop the love of reading which will encourage children to engage in reading as an enjoyable pastime. The multi-sensory approach of the THRASS programme will enable to the government to successfully implement this policy (Griffiths 2008b).

The teaching of English in Africa has also changed with the implementation of the THRASS synthetic phonics programme in South Africa, Zimbabwe, Nigeria and Namibia. The THRASS synthetic phonics has become renowned '... as having the potential to more than double the normal rate of progress ...' (Griffiths 2008a) of readers and spellers of English.

The Namibian Government is in the process of introducing THRASS into all schools. The THRASS Accredited Certificate training has been completed by forty education advisers in the last year. USAID is aiding the initiative to implement regional training. THRASS UK would like to provide an opportunity for Foundation Phase student teachers in the four teacher training colleges in Namibia to gain familiarity of the programme in the same way that it is working with teacher training colleges in South Africa (Griffiths 2008a).

In Nigeria, the THRASS pilot project had been running for merely four months when the programme became a victim of its own success due its popularity amongst the teachers, learners and parents. Mr Davies explained that the children who had been placed in the experimental groups and were learning the songs from the SING-A-LONG resources, loved and enjoyed the songs so much that they were teaching the songs to the learners who were not exposed to the resources. The parents in some schools insisted that the head teachers combine the classes as they were concerned that their child might miss out on the opportunity. This meant that the THRASS

classes consisted of more than seventy children. The problem that arises is that the conventional control group in the pilot falls away. The teachers have shown their enthusiasm due to the confidence they have in the THRASS programme and they feel empowered to teach reading and spelling skills to learners (Griffiths 2009).

In Zimbabwe the THRASS programme has been introduced to ensure that the aspirations of the children are realised as well as those of the parents, teachers and other sectors in the country which includes the Government Ministers and officials (Coltart 2009).

The pilot THRASS programme was introduced into Zimbabwean schools in 2008 where the THRASS SING-A-LONG resources were used to introduce the programme. An immediate success in the programme was recognised and in April 2009 permission was granted to Davies by the Government to prolong the project by funding the necessary training for the teachers at the original pilot schools and also include other pilot schools in the Nyanga District (Coltart 2009).

The workshops were funded by Alan and Hilary Davies ensuring that a hundred teachers were trained along with quite a few education officials from both the Ministry of Education and Nyanga District (Coltart 2009).

In South Africa, the THRASS synthetic phonics programme is being sponsored by Absa Bank, by means of the THRASS Absa TalkTogether Project, that was launched in July 2007. The aim of the project is to transform the way teaching and learning of language takes place in South Africa. This will be actualised through the various partnerships that will take place between primary schools, universities and other interested organisations. The current number of teachers and student teachers that have earned the THRASS Accredited Certificate in South Africa is four thousand. The THRASS Absa TalkTogether Project has sponsored about six hundred of these teachers. Absa Bank TalkTogether Project proposes to present THRASS to hundreds of schools during 2008 which will provide schools with the SING-A-LONG Resources (Griffiths 2008a).

South Africa has witnessed the success of the THRASS synthetic phonics programme and therefore the THRASS Accredited Certificate has become a compulsory module for Foundation Phase student teachers at five universities, which include the University of the Witwatersrand, Johannesburg, and the University of Pretoria. Pritt is also a sponsor of the THRASS programme in South Africa as well as the art and craft ideas company (Griffiths 2008a).

The lives of many African children from diverse backgrounds and in a variety of schools are being altered through the THRASS synthetic phonics programme. This programme has the potential to alter the lives of all children living in Africa with just a small amount of additional investment (Griffiths 2008a).

2.7 TEACHING READING IN THE EARLY GRADES: A TEACHER'S HANDBOOK

2.7.1 Introduction

The Teacher's Handbook was developed in order to assist teachers who are required to teach reading and writing. This handbook was designed to assist teachers teaching Grade R to Grade 6. The sections pertaining only to the Foundation Phase will be elaborated upon as the research conducted focused on this group of learners (Department of Education 2007:1).

The language programme in the Foundation Phase is referred to as the Literacy Learning Programme. During the Foundation Phase the learners are taught the fundamentals pertaining to reading, writing, and basic literacy. It is important that the language programme in the Foundation Phase be covered correctly as the Intermediate Phase language programme (Language Learning Programme) is built upon the first one. The teachers from the two phases need to collaborate in order to establish what requirements the learners need to master in the different phases. For that reason, the Handbook deals with both phases (Department of Education 2007:1).

In the research project described in this dissertation the control group was taught using the handbook prepared by the Department of Education: *Teaching Reading in the Early Grades: A Teacher's Handbook* (Department of Education 2007). The

experimental group also consulted the Teacher's Handbook and included the THRASS methodology.

2.7.1.1 Time allocation for Literacy Learning Programme on the timetable

The amount of classroom time that has been allocated to the Literacy Learning Programme for Grades R to 2 is 1 hour and 50 minutes per day, which calculates to 9 hours and 10 minutes per week. The Grade 3 group is allocated 2 hours per day, which calculates to 10 hours per week (Department of Education 2007:2).

2.7.1.2 The essential features of the Literacy Learning Programme

The Literacy Learning Programme consists of the following essential features:

- Reading and Writing Focus Time
- Listening and Speaking
- Writing
- Additional languages

The fundamental emphasis of this handbook is placed on the Reading and Writing Focus Time as it is during this time that the learners will develop their reading and writing skills (Department of Education 2007:1).

2.7.1.3 The Reading and Writing Focus Time explained

During this time the basic literacy skills will be taught. It is important to ensure that reinforcement of these skills takes place regularly. An hour of the school day should be devoted to the reading and writing focus time. This time is to be used to teach the learners methodically in order to establish the learners into effective readers and writers.

In order for the learners to become fluent readers various skills need to be developed. Other language skills that need to be developed in order to develop reading skills include writing, spelling and sentence activities.

During the reading and writing focus time the teacher can use the following:

- Shared reading
- Shared writing activities

- Word-level and sentence-level work
- Guided reading and writing
- Independent reading and writing activities (Department of Education 2007:3).

The elements relating to the reading and writing focus time are as follows:

- The teacher is to dedicate 30 minutes to teacher guided reading and independent reading
- 15 minutes is to be dedicated to whole class shared reading and writing
- 15 minutes is to be dedicated to word level and/or sentence level

It is important to note that these elements be taught in combination or are integrated instead of being taught in isolation (Department of Education 2007:3).

2.7.1.4 Activities to be done during Reading and Writing Focus Time

It is recommended that these activities be done with the whole class. The instructions are to be given to the learners and the learners are given the opportunity to practice an assortment of language skills in order to improve their reading skills. The teacher should consider linking these activities to themes where it is possible to do so. Shared writing activities can emerge, for instance, from a shared reading text where the basis for an additional writing task can be given (Department of Education 2007:4).

Language aspects that emerge from the reading and writing sessions will be worked on at the word and sentence-level. The following are some examples that could be addressed:

- Phonics
- Spelling
- Vocabulary development
- Grammar/sentence work
- Punctuation

(Department of Education 2007:4).

2.7.1.5 Guided and Independent Reading and Writing

The teacher is to use this section of the reading and writing focus time to concentrate on small groups in order to direct the learners in their endeavors to improve their reading and writing abilities. The rest of the class should engage in independent reading while the teacher focuses her attention on the group. This means that there are times when the whole class will be engaged in the teaching and learning activities and there will be times when the teacher organises the work into smaller groups.

The time allocation and fixed structure guarantees that the learning components will be short and that the learners will be motivated and interested in learning that particular component.

It is suggested that the reading and writing focus time be applied throughout the school. The learners will become accustomed to the routine, and this will ensure that they adjust comfortably to the way the time has been organised. Regular patterns of learning will enable learners to progress from one grade to the next more easily. The teacher in the next grade will be able to pay attention to the teaching and learning activities that will take place instead of establishing new routines first (Department of Education 2007:4).

2.7.1.6 Listening and Speaking

Although the primary aim of this handbook is to teach reading other literacy skills such as listening, speaking, and writing also need to be developed.

Learners who enter the schooling environment are capable of listening and speaking. These are important components as they develop the thinking, reading and writing skills of the learners. It is however critical that learners are taught to listen and speak specifically.

The reading and writing strategy rely on listening and speaking in the learner's home and additional languages (Department of Education 2007:4-5).

2.7.1.7 Writing and Handwriting

In the Foundation Phase more time is allocated to handwriting where the learners are taught to legibly form letters, words and numbers. In the Intermediate Phase writing becomes an expressive and creativity activity (Department of Education 2007:5).

2.7.1.8 Learning Outcomes (LOs)

The Learning Outcomes pertaining to the Language Learning Area support the reading and writing focus time are outlined as follows:

- Learning Outcome 1 (LO1) – Listening
- Learning Outcome 2 (LO2) – Speaking
- Learning Outcome 3 (LO3) – Reading and Viewing
- Learning Outcome 4 (LO4) – Writing
- Learning Outcome 5 (LO5) – Thinking and Reasoning
- Learning Outcome 6 (LO6) – Language Structure and Use
(Department of Education 2007:5).

2.7.2 Teaching Reading

2.7.2.1 Planning the Reading and Writing Focus Time

It is essential that an effective reading programme is established by the teacher to ensure that his or her learners are equipped to become competent readers.

Activities that should be modeled and taught to the learners by their teacher during the reading and writing focus time include some of the following:

- during the shared and guided reading sessions the teacher should model reading behaviour for his or her learners to follow
- encouraging learners to apply a variety of reading strategies when they are unsure about the text, for example, re-reading, reading ahead, and using pictures.
- use a variety of assessment approaches in order to recognise each learner's individual needs and to provide differentiated instruction where necessary.
(Department of Education 2007:7).

2.7.2.2 Skillful readers

A skillful reader is someone who is able to comprehend what they read. In order to do this the reader is required to have general knowledge, knowledge of the language he is reading as well as have knowledge of the various letters and the sounds the letters make. Reading fluency is important so that the reader does not forget what was read at the beginning of the sentence once they reach the end.

The skillful reader uses a variety of strategies while reading. Other learners in class can also become skillful readers by performing specific activities (Department of Education 2007:7).

The following gives an indication as to some of the reading processes that teachers should teach their learners:

- Before reading – The learner should read the title page
The learner is to look at the content and index pages.
Encourage the learner to read the sub-headings and title pages.
The short description of the contents should be read.
Look at the illustrations.
(The skillful reader will use this information to forecast what the text will be about).
- During reading - The learner should be able to read a range of words without dividing them into their individual sounds or syllables.
The meaning of the text should be checked to make sure what is being read, is clear to the learner.
If a learner comes across a word that he or she does not know the meaning to, the learner should be encouraged to continue reading the sentence or paragraph in order to ascertain what the word means. Alternatively the learner can break the word into various sounds or syllables.
- After reading - The learner now associates the text to his or her individual ideas, experiences or opinions.

Encourage the learner to remember any new words as well as their meanings especially since they may see them in other contexts.

(Department of Education 2007:8).

2.7.2.3 The stages of reading development

It is suggested that reading involves six stages. It is preferred that the learner acquire his or her reading skills gradually from Stage 1, the pre-reader, up to Stage 6 during his or her first two years at school.

The six reading stages are:

Stage 1: The “pre-reader”

During this stage the learner is encouraged to hold the book and turn the pages correctly. The beginning and the end of the book is recognised by the learner. The learner listens and responds appropriately to the story. The learner is able to understand the pictures. The learner may know some letters and pretends to read. An interest is shown in the print when it is displayed in the world around them.

Stage 2: The emergent reader

At this stage the learner is able to use the pictures in order to tell the story. Some of the phonemes (sounds) as well as the letters that make the sounds are known by the learner. The learner is aware that when reading European and African languages that the print goes from left to right and from top to bottom. The learner reads with the teacher or the reader when a familiar book is read to him or her. Words are recognised by the learner, such as, his or her name. He or she is able to read print that occurs in his or her environment. The learner is able to read familiar books with word patterns.

Stage 3: The early reader

At this stage the reader knows most letters sounds and their names. Common words are recognised by the learner. The learner is able to retell a story that is age-appropriate. Pictures are used by the learner in order to make meaning of what he or she is reading. It is expected at this stage that the learner is able to read 70% of the words encountered correctly when reading a familiar text at his or her level. The

learner may read aloud when reading to him or herself. It is to be expected that the learner will not read fluently yet as he or she still reads words or word. Early readers read picture books that contain patterns, repetition and rhyme in his or her home language as well as in additional languages.

Stage 4: The developing reader

The developing reader will use the pictures in order to make meaning of what he or she is reading. The learner is now in a position to use his or her knowledge of sentence structure. The knowledge the learner has acquired enables him or her to decode words using phonics. The developing reader is able to combine words into phrases instead of reading word for word. The learner is able to retell the beginning, middle and end parts of the story using some detail. At this stage the learner has a basic sight word vocabulary of about 50 words. The learner is able to recognise the word and he or she knows what the words mean. At this stage the developing reader starts to apply punctuation while he or she reads. Silent reading also starts during this stage. The learner is able to correct him or herself when making an error. The books that the learner chooses to read at this stage also becomes longer, as long as the book has large print and the text is easy.

Stage 5: The early fluent reader

During this stage, the learner will be able to use various “cueing” strategies in order to comprehend what he or she is reading. Some of these “cueing” strategies include, phonics (sounding out), language knowledge (familiarity with sentence structures), and general knowledge. At this stage, the learner will recognise about 200 familiar words on sight. The early fluent reader is able to read about 60 words a minute. The learner understands that punctuation can be used in order to enhance comprehension. The learner begins to understand implied reading. Reading of longer texts with more complex sentence structures begins during this stage. The learner starts to develop knowledge of the story elements such as plot, characters and the conclusion of the problem. During this stage the learner is able to read silently for longer periods. The learner starts to use reference resources with guidance. The learner now selects books with chapterd where the print is smaller.

Stage 6: The independent reader

During this stage the learner is able to subconsciously use “cueing” systems (phonics, language and general knowledge) as these systems have been integrated into the learner’s general approach to new texts. The learner is able to read about 60 or more words in a minute fluently. During this stage, the learner is able to understand books with unacquainted sceneries. The learner now reads more advanced fiction and non-fiction books. The learner uses resource books self-sufficiently (Department of Education 2007:8-11).

2.7.2.4 The usefulness of the reading stages

The stages of reading, as described above, provides the teacher with practical guidelines that can be used in order to determine the reading stage that has been reached by his or her learners. The teacher is also able to determine the level of knowledge, skills and strategies that still need to be learned and practiced by the learner.

The reading stages can also be used when the performance of the individual learners need to be assessed. The assessment takes place in order to determine which reading skills still need to be developed. For example, a reader in Grade 5 who experiences reading difficulties may be reading at Stage 3, and a strong reader in Grade 3 may be reading at Stage 5. By the time the learners reach Grade 6 they should all be independent readers (Department of Education 2007:11).

2.7.2.5 The five components used to teach reading

The five main components used to teach reading that have been agreed upon by most reading experts, include the following:

Component 1: Phonemic awareness

Component 2: Word recognition and includes sight words and phonics

Component 3: Comprehension

Component 4: Vocabulary

Component 5: Fluency

It is important that these components be taught explicitly. The learner is to be given the opportunity to practice these components on a daily basis and in context. These components will be elaborated upon (Department of Education 2007:11).

Component 1: Phonemic awareness

A learner who has developed his or her phonemic awareness is able to think about, notice and work with individual sounds as they occur in spoken words. In order for learners to read print, they first have to know how sounds work in words. The learner has to understand that words comprise of sounds or phonemes.

A phoneme is the smallest unit of sound that occurs in a spoken word. For example in the word “hot”, the letter ‘h’ is represented by the ‘*huh*’ sound.

Learners are intuitively aware of phonemes, otherwise they would not be able to understand language or speak words. When the learners are taught to read and write they develop a sense of awareness of the components that make up the individual sounds (phonemes) found within each word.

As the learners progress they will become aware that the sounds can be written as an individual letter or they can be written as a group of letters. For example, the learners will know that the ‘*buh*’ is the sound that is written as ‘*b*’. Phonics is the link between the sound and the letter.

Activities that can be used in order to develop phonemic awareness include poems, songs and rhymes. The teacher can address the explicit “sounding out” words during the word and sentence-level time (Department of Education 2007:12).

Component 2: “Word recognition”

During word recognition, the learners acquire the skills they need in order to read unfamiliar words. The two main components that are needed in word recognition are phonics and sight words.

Phonics

The learner will use phonics to decode a word by dividing it into syllables and letters. Teachers use phonics to teach their learners the relationship that exists between the letters that occur in written language and the individual sounds these letters make in spoken language. This knowledge will enable the learners to read and write words.

Phonics instruction provides the learner with tools that enables him or her to decode words easily. The learner may not understand what the word means in a foreign language, however, this is an important building block that will enhance the learner's understanding of unfamiliar words. The learner is able to construct meaning to words when he or she is able to decode words (phonics) and use vocabulary (the understanding of what words mean).

An almost direct link exists between the alphabetical letters and the sounds they symbolise as they are found in the indigenous African languages, and not excluding Afrikaans. The letters and the sounds generally correspond where the letter sounds are not altered significantly when other letters are near it. It, therefore, becomes easier to teach phonemic awareness and phonics in the indigenous African languages and Afrikaans than it is to teach these skills in English.

The English alphabetic system consists of 26 letters and consists of 44 phonemes (sounds) and 120 graphemes (letters and their combinations). These deviations provide an explanation as to the reasons why teaching phonemic awareness takes longer to learn in English than it is to learn in the African languages and Afrikaans. The sequence of letters that make the "ough" sound in English can be sounded differently, depending on the word used, for example, "plough" or "thought". This occurrence is not encountered in the African languages or in Afrikaans.

It is imperative that learner who is learning English understands that each letter has a name and that each letter could have a various ways of sounding it. For example, the letter 'a' will sound differently in each of the following words, 'car', 'bake' and 'fat' (Department of Education 2007:13).

Sight words

Sight words can be described as words that the learner is required to recognise by its shape, length and other features. These words are also known as the “look” and “say” words.

There are some strong deliberations as to why sight words need to be taught in English. It is important to teach sight words as the most common words, also known as “high-frequency words”, do not have a regular letter-to-sound relationship. Some words that display this disparity include: **you, this, was, because, and, me**. These words demonstrate that they cannot be decoded by using or following the rules or principles on which phonics is based. The word, “was”, for example, sounds like “wuz”, and therefore cannot be decoded instead this word has to be recognised by sight. It is the opinion of experts, that approximately 90% words can be totally or at the very least be partially decoded. This means that teaching the learners to decode words remains an important task (Department of Education 2007:14).

Component 3: Comprehension

A teacher who has been given the all-important task of teaching reading to his or her learners needs to ensure that the learners are not merely “barking at the print” but that they are able to understand and interpret the text they are reading.

It is important to ensure that the learners develop the ability to understand (comprehend) texts from the very beginning. It should not be left until the learner can recognise a certain number of sight words or until he or she is able to break words into their separate components.

Some strategies that can be used in order to enhance comprehension skills include the following:

- Activating the readers’ prior knowledge. Foundation Phase learners are encouraged to activate their prior knowledge whenever they read a new text. Learners who enter the Intermediate Phase should be able to do this independently.

- Reading aloud to the learners. Effective and independent readers are able to use their knowledge of language as well as their understanding of their world in order to make sense of the texts. Teachers are to assist their learners in developing this knowledge. Teachers, who read aloud to their learners, can then discuss the meaning of the text and hear what impressions the learners have regarding the text. Teachers can encourage learners to predict what will happen next.
- Encourage learners to use clues and illustrations found in and around the text. These clues can include the words written on the cover, using paragraph or chapter heading, sub-headings and words that appear in bold, the contents page as well as the index. Also draw the learners' attention to illustrations, tables, cartoons, photographs and graphs that may appear on the page. These clues can be used in order to assist the learner make sense of what he or she is reading.
- Developing the learners' decoding skills. It is important that learners are able to decode familiar and unfamiliar words as most new texts will contain new words. The learners can be encouraged to sound out just the beginning part of the word in order to determine whether the familiar word will trigger their memory.
- Learners who are fluent readers are able to comprehend the text by reading a phrase or sentence and not having to decode each word as they go along. Learners are also able to remember the beginning of the sentence before they get to the end.
- Vocabulary is increased through reading and by listening to someone else read. An increased vocabulary enables learners to determine the meanings of words from their contexts. Teacher can read various texts, such as, newspaper articles, stories or information books.
- Higher order thinking skills, such as, analysing, evaluating and interpreting can be developed by asking questions that promote thinking about and processing information through using these three high-order skills. Grade R and Grade 1 learners are capable of developing these skills (use stories that the learners are familiar with to do this).
(Department of Education 2007:14-15).

Component 4: Vocabulary

In order to develop into good readers, learners need to have knowledge and understanding of a wide range of words as this helps with fluency and comprehending the text. Some vocabulary can be learnt incidentally while the learner is reading; however, vocabulary also needs to be taught deliberately.

Some guidelines as to how vocabulary can be taught, include the following:

- Encourage learners to read texts that interest them as this motivates them to work out the meanings from the contexts.
- Vocabulary is introduced to learners by reading aloud to them for at least 30 minutes, once a day. Stop when a new or an odd word is read and explain it to the learners.
- Regular independent reading time enables learners to come across words many times which makes it a familiar word that the learner is able to remember.
- 6 to 8 new words can be taught explicitly each time the learners participate in reading aloud, shared and guided reading and writing activities.

(Department of Education 2007:16).

Component 5: Fluency

Fluency is the ability to read texts smoothly, accurately as well as with understanding. Fluency is an indication of comprehension as a learner who reads one word at a time will also most probably have problems in comprehending the text.

Learners need to read a lot in order to become fluent readers. Some guidelines as to how fluency in reading can be developed include:

- The most obvious way of supporting learners to become familiar with the text is by allowing them to re-read a text a few times. In this way they become fluent readers.
- Learners can learn about fluency from Grade 2 onwards so that they can be encouraged to practice reading in order to become fluent readers which will enable them to read texts from other Learning Areas as well.
- Provide the learners with as many reading materials as possible.

- Schedule independent reading as part of the reading and writing focus time each day.

(Department of Education 2007:17).

2.7.3 Shared Reading and Other Reading Strategies

2.7.3.1 Shared reading

Shared reading usually involves the whole class where the learners participate in the reading task with the teacher. The learners eventually take over from the teacher.

This type of reading should be done in a relaxed environment where the learners are encouraged to guess and take risks. Teachers are to accept all attempts made by the learners where the learners' responses are used as a guideline for further reading. Praise the learner for trying. In this way learners realise that their errors help them build on what they already know.

Shared reading sessions need to be carefully planned and presented to ensure that a learning environment that is supportive in order to assist the weaker members of the class to function as readers. These sessions will expose all learners to various reading strategies that they will be able to use independently when needed in future (Department of Education 2007:19).

1. Aspects teachers are teaching learners about reading

Teachers are teaching the following aspects during shared reading:

- the reasons for reading certain kinds of texts
- how to read this type of text
- the expression and intonation (tone of voice) that should be used
- how to respond to the given text
- pay attention to the text level, word-level, or sentence-level that occur in the text

(Department of Education 2007:20).

Shared reading is useful for the following reasons:

- any age, ability group or grade level can use this type of reading

- active participation is allowed for, but not demanded
- good literature and rich language is allowed for in the early-reading programme
- the learner's sight and listening vocabularies are enhanced
- direct instruction in short, clearly intensive lessons, including the teaching of many interesting topics, such as:
 - rhyme (the sounds that match, e.g. "sweet cream")
 - rhythm (is the "music" of the words)
 - alliterations (words that use the same letter, e.g. "happy holiday")
 - phonics (sounds).
- Make shared reading fun by encouraging the learners to participate by clapping, dancing, stamping or singing. Some suggestions include:
 - Select a word and ask the group to think of other words that rhyme while the teacher reads.
 - The learners could clap every time they hear the letter "S".
 - Encourage the learners to think of alliterations.
 - Give the learners the words to a song and ask them to sing it.
 (Department of Education 2007:20-21).

2. Texts to use during shared reading

The teacher is to select a text that is above the independent reading level of most of the learners in the group. The teacher will assist the learners in comprehending the text as the teacher reads the text aloud and then will encourage discussion.

Texts that can be used include the following:

- Big books
- The following enlarged texts:
 - Stories
 - Learners' own writing
 - Magazines and newspapers
 - Poems
 - Songs
 - Non-fiction articles (texts that are factual)

- Advertisements
- Pamphlets

Select a text that can easily be seen by the entire class. Texts can also be viewed via overhead projector transparencies, data projectors as well as using interactive white boards (Department of Education 2007:21).

3. The duration of a shared reading lesson

Ideally these lessons should last between 15 and 20 minutes in the Foundation Phase. These sessions can be placed on the teacher's timetable (Department of Education 2007:22).

4. How to plan shared reading lessons

The shared reading lessons can be planned by following these steps:

- **Choose a text** and decide how many shared reading lessons there will be using this specific text. Two to four lessons can be planned per text, all depending on what the teacher wants to do with the text.
- **Choose a teaching focus** such as phonics, language, or a print "convention" (such as using speech bubbles). Lessons two and three will be used for this.
- **Plan lessons carefully** in order to anticipate the types of questions that will ensure that the learners' attention is maintained on the characteristics of the text.
- **Keep lessons short** and at a good pace (not too slow and not too fast) and should be enjoyable.

(Department of Education 2007:22).

Examples for four sessions are provided.

Shared reading – Session one

- The learners should be seated so that they can all see the text clearly.
- The learners are to be motivated through a general introduction that is related to the topic or context of the story.
- Look carefully at the cover information given on the book, point out the title, author's name and any other useful information.

- The teacher will model good oral reading behaviour by pointing under the text as it is read.
- Take a pause and ask the learners questions about the text. The learners should be encouraged to predict what will happen next.
- Accept all responses from the learners positively by praising the learners.
- Learners, who want to participate in the reading, should be allowed to do so, however, do not force them to do so. A slight pause can often encourage participation. There may be some learners who are at the listening level of participation.
- At the end, allow the learners to express their personal responses pertaining to the text. This could include the content of the story, the ending, or what they found funniest or most sad part of the story.

(Department of Education 2007:22).

Shared reading – Session two

Here you will select the same text as above. Reread the text and ask the learners to join in where they can.

Point under the text as demonstrated during session one. A learner who is able to read a bit can do this.

Further discussion should be encouraged pertaining to the illustrations or to the interesting phrases that occur in the text by pointing out the features or asking questions.

The learners can experiment with expression and intonation as they read the text. This means they will change their voices.

The aspects that have been selected as the focus for the lesson should be pointed out. These could include the following:

- Discuss and analyse the content by asking questions and finding the text that supports the responses
- Talk about the illustrations
- Explain and define new words and find them in other parts of the text.
- Look up the meanings of words.

(Department of Education 2007:23).

Shared reading – Session three

Two readings may be sufficient for some learners in order for them to read the text independently. For other learners, however, a third session may be needed.

Follow the steps as outlined in Session two above in order to accommodate all the learners in the group or class.

Where possible, make a smaller version of the text available to each learner in order for them to read it during independent reading time. The learners should be allowed to use pointers as well (Department of Education 2007:23).

Shared reading – Session four

The same text can be used during this session where other planned activities can be based on it. A few suggestions include:

- The learners can dramatise the story where they act out the various roles in the story.
- Illustrate your favourite part of the story and include a text to it before it is displayed on the classroom wall.
- In the Grade R and Grade 1 classes place flashcards with key vocabulary to match cards in the enlarged text.
- Sentence strips can be made of the text.
- The learners can be given the sentence strips and asked to sequence them.
- A story-frame of the text is to be completed.
- A new story can be created in the shared writing lesson. The story can be based on the shared reading text and used as the new text in shared reading lessons.

(Department of Education 2007:23).

5. How to get more help using the shared reading in the classroom

- The teaching manual should be read that accompanies the reading scheme used at your particular school – especially if the scheme includes Big Books.
- Plan a series of lessons together with colleagues.
- Ask a colleague to view your shared reading lesson so that it can be discussed after school.

- The teacher can reflect upon his or her own teaching and think of ways in which to improve.
- Read the teaching strategies. The strategies will ensure that confidence is built up in the learners as they are allowed to become independent readers as soon as possible.

(Department of Education 2007:24).

2.7.3.2 Other reading strategies

1. Word Attack Skills (how to decipher an unfamiliar word)

An elementary “five-finger” strategy can be used in the early stages of learning to read. This strategy will enable learners to use a variety of word-attack skills while learning to read.

Thumb: Use your thumb to omit the word and read to the end of the sentence.

First finger: Use your first finger to point to the pictures and the headings.

Second finger: Use this finger to ponder if there are parts of the word that are recognisable.

Third finger: Sound out the word.

Little finger: Ask your teacher the meaning of the word.

(Department of Education 2007:25).

The learners should now be taught how to conclude that the meaning that they have arrived at is correct by asking the following questions:

- Does it sound right?
- Does it make sense?

Reading strategies can be drilled for the day by selecting a particular strategy that can be applied for that day. This strategy can be practiced during the reading and writing focus time. A different strategy can be selected for the next day. The strategies should be changed to ensure that the learners will be able to use them confidently in a flexible way (Department of Education 2007:26).

2. Comprehension (making meaning)

The following steps can be followed in order to ensure that your learners can observe their own understanding of a text:

- As soon as it becomes apparent that the text does not make sense, stop and re-read the sentence or paragraph.
- Attempt to link the problematic sentence to what you have read already.
- Ponder what knowledge you have already accumulated about the topic and think what the sentence could possibly mean.
- Use a dictionary to look up the meanings of words or ask someone for help.

(Department of Education 2007:26).

2a. Read aloud

During the read aloud lessons the teacher reads to the whole class or to a small group. Ensure that the material is applicable to the listening level of the learners. The topic could relate to the curriculum or a learning area.

Learners who are reading aloud develop a love for good literature, they become motivated to read independently and they develop a familiarity with regards to the various genres.

The learners are in a position to learn new words, and reading aloud contributes to their written and oral language development. It is recommended that the learners read every day to ensure that they develop an interest in reading and books (Department of Education 2007:26).

2b. Group guided reading

The group guided reading sessions are reading activities that are directed by the teacher. The books are carefully selected to ensure that the reading material is at the learner's instructional level. The teacher is to facilitate the group as the learners talk, read and think about the given text.

The learners can be grouped according to their reading abilities or according to their specific needs. The groups can be changed as the teacher assesses and observes the learners.

During these sessions the learners learn about the agreements of print, the various letter-sound relationships as well as other foundational skills. The learners develop their vocabulary and use various comprehension strategies.

These sessions enable the teacher to observe the reading behaviours of the learners. The teacher is able to identify areas that need to be developed, such as providing the learners with more independence reading where the learners gain confidence as they practice and combine their reading behaviours.

It is through guided reading that the learners eventually become independent readers (Department of Education 2007:1126-27).

2c. Independent reading

The independent reading sessions are planned and purposeful lessons where the learners may select their own books to read in accordance with their interest and reading ability. Encourage the learners to select a book that they will be able to read with a high level of success.

During this time the emergent readers should be encouraged to practice reading short anticipated stories as well as books that have been read previously in the shared guided reading lessons.

Once the learner has completed the story, he or she should discuss the story with his or her teacher or peers.

The teacher is provided with the opportunity to observe, listen and to gather information about the learners' reading behaviour as they occur during these sessions (Department of Education 2007:27-28).

2d. How to manage the class during the reading and writing focus time

Half an hour should be set aside during the reading and writing focus time for guided reading and independent reading and writing activities. While the teacher is working with one group of learners, the other groups could work on independent tasks that have either a reading or writing component. These lessons must be carefully

planned so that the materials the learners will need are ready before the lesson begins (Department of Education 2007:28).

2e. Managing learners as they work independently

A routine and behaviour code should be established in the class. This can be done together with the learners during a shared writing lesson where the learners write down the rules.

Here are some guidelines for maintaining order and for getting everyone into the classroom routine:

- **Give names to the groups** where the names of the learners working together in a group can be displayed on a chart in the class.
- **Use task boards** to manage the series of activities that will take place while the teacher works with individual groups. Use symbols for the various activities that have to be completed and ensure that all the learners understand what they must do.
- **Give each group a number of tasks to complete;** this can be done individually or in groups. Explain the tasks the learners will be required to do for the thirty-minute session.

An example of a task board

Group 1: work with the teacher

Group 2: Write about your daily news and the weather

Group 3: Work with puzzles

Group 4: Write a story starting with the words: “When I grow up one day I would like “ (Department of Education 2007:28-29).

2f. Activities for the learners while the teacher works with the guided reading group

The learners should be engaged in interesting independent reading and writing activities throughout the week.

Independent reading activities need to be planned according to the different ability groups in the class. The teacher should begin by looking at the focus of the teaching required for each week. The activities should be planned so that they consolidate the skills that have been taught in the reading and writing focus time sessions.

More hints for planning and organising reading activities can be obtained from the handbook in detail (Department of Education 2007:29).

2g. How to motivate learners to read books

The following are some ideas that can motivate the learners in your class to read books:

- Get the learners to design books jackets for their favourite books. These can be displayed in the reading corner, advertising which books are a great read.
- Ask the learners to design a 'booking' form that allows learners to fill in a time so that they can read their popular books.
- The learners should be encouraged to write comments about books they have read and which books they would recommend to their peers. The comment-sheets can be displayed in the reading corner for everyone to read.

(Department of Education 2007:30).

Some ideas for independent writing activities that can be done in the classroom include the following:

- Place different forms of writing, such as a list, a paragraph, a friendly letter, a story or a play-script in a box. These will be examples of learners' own writing that can be enlarged and used during the shared writing time.
- "Editing" cards can be made for each type of writing that will be done during the year. Print questions on the cards that pertain to planning a particular piece of writing.
- Scrap paper should be provided to the learners when they are required to spell an unfamiliar word. The learners should be encouraged to attempt spelling words differently, especially in English, where they develop a sense of a word "looking right". These attempts are called "have-ago" words.

(Department of Education 2007:32).

2.7.4 Assessing reading

2.7.4.1 Reasons for assessing reading

Reading needs to be assessed for the following reasons:

- The progress of the learners needs to be monitored
- To ensure that the reading programme is at the correct level for the intended learners.
- In order to determine which learners are experiencing difficulties with reading, and which reading skills need to be developed, for example, phonics, word recognition or comprehension (Department of Education 2007:35).

2.7.4.2 What the reading results reveal

The information that you acquire from the assessments will help the teacher evaluate his or her literacy resources. The teacher will need to obtain the following:

- The teacher might need a new reading programme
- More graded readers may be needed for reading practice
- A phonics programme may be needed to supplement the language programme
- Different levels of reading books
- Include culturally appropriate books
(Department of Education 2007:35).

The information obtained from the assessment will determine what activities the learners can do during the reading and writing focus time. A few examples include:

- Some learners may need more time in guided reading time.
- Some learners may need more time practicing reading in independent reading and writing.
- The teacher may need to spend more time being a “model in shared reading.

(Department of Education 2007:36).

The information obtained from the assessment can also aid the teacher in evaluating his or her general approach when teaching reading. The teacher may need to:

- Introduce or add new methods in order to develop reading skills

- The teacher may need to increase his or her teaching pace.
(Department of Education 2007:36).

2.7.4.3 Reading level tests

Reading tests that are able to determine the reading levels of the class are short and general tests. These tests are used to:

- To determine the reading levels at the start of the year
- Place learners in various groups for guided reading
- Identify those learners who experience difficulties.
- Determine whether the readers and textbooks used in the classroom are at the appropriate level for the learners.
(Department of Education 2007:36).

There are various types of leveling tests that can be considered, namely:

Error count tests are administered as follows:

- Approximately 100 words at grade level are selected.
- A learner is called to the teacher's table and asked to read the words.
- The teacher counts the errors as well as full stops that were missed.

The results are interpreted as follows:

- A learner who makes less than five errors is reading comfortably at his or her grade level and may need more challenging tasks in the near future.
- A learner who makes between five and ten errors is reading below his or her grade and may need to practice more.
- A learner who makes more than ten errors will need more assistance.
(Department of Education 2007:36-37).

In a "**Cloze**" **procedure test**, the teacher would leave a blank in the text and the reader is asked to complete the sentence. These scores can be used to assess the learner's reading comprehension, writing, listening, and speaking abilities. The results enable the teacher to place learners into groups of similar language ability
(Department of Education 2007:37).

Observing reading behaviour is one of the best ways of assessing learners and “matching” them to the texts as they read. The observation takes place during the guided reading that takes place weekly (Department of Education 2007:38).

It has been noted that every reader will read a text at one of three levels (ordered from strongest to weakest):

1. Independent level
2. Instructional level, or
3. Frustrational level.

Learners who are reading at the **independent level** read without any difficulties in decoding or understanding the text. The following behaviours will be observed:

- The learner reads orally in a rhythmical and expressive manner
- The learner observes the punctuation
- The learner displays a relaxed reading posture
- He or she does not use his or her finger while reading
- The learner is able to read silently during silent reading sessions without vocalisation
- The learner displays no anxiety.

(Department of Education 2007:38).

Learners who are reading at the **instructional level** are able to read fairly easily, making few errors. The learners are able to self-correct at times but they are able to understand most of the content. The following behaviours will be observed:

- Their oral reading is most smooth.
- The learner observes most punctuation.
- The learner stumbles or stops at a few words only.
- The learner re-reads parts of the text, or self-corrects at times (that indicates that the learner is reading with understanding).
- The learner uses his or her finger at times while reading.
- The learner whispers at times during silent reading sessions.
- The learner may show that he or she is a little nervous.

(Department of Education 2007:38-39).

Learners who are reading at the **frustrational level** read a text without understanding, they make quite a few errors, or they read words incorrectly but with no understanding. The following behaviours will be observed:

- The learner displays unnatural head and lip movements.
- Their voice is either too soft or too loud.
- They have a poor reading posture.
- Frequent finger-pointing is used while reading
- The learner vocalises during silent reading sessions
- The learner shows no interest in the text
- Word-by-word reading takes place
- The learner shows signs of fatigue and rubs his or her eyes.
- They make inappropriate comments regarding the text.
- They may ask to leave the room.
- The learner may tense his or her hands, swallows, has a dry mouth and possibly tears.

(Department of Education 2007:39).

Diagnostic tests reveal which reading skills and strategies are being utilised by the learner. Learners who are reading well in their grade will not need to be tested which means these assessments will be conducted with only a few learners.

Diagnostic tests will assist the teacher in the following ways:

- Making wiser choices when planning his or her lessons.
- Gaining a better understanding of the difficulties learners experience that are below the expected grade level and how to assist them.
- Deciding on what interventions and improvements can be made.
- Aiming to reach a “summative” score of the learner’s achievements at the end of each month or by the end of each term.

Diagnostic tests can assist in three main ways:

- Testing the learner’s fluency and vocabulary.
- Testing the learner’s comprehension

- Testing word recognition which includes phonics and sight words.
(Department of Education 2007:39-40).

Diagnostic tests using cloze procedures can be used when a teacher would like know which reading skill needs to be developed. They are useful in diagnosing the following problems:

Problem 1: A learner who lacks language knowledge and fluency

Problem 2: A learner who lacks vocabulary, comprehension and fluency

Problem 3: A learner who lacks word recognition skills.

(Department of Education 2007:40).

Diagnostic tests that use reading checklists can be used to identify each individual reader's progress, as well as indicate his or her weakness. There are five levels of reading, after the "pre-reader" level, as well as a checklist for each level.

The five levels are:

- Emergent readers
- Early level readers
- Developing level readers
- Transitional readers
- Independent level readers

The teacher will need five different reading texts when testing his or her learners. Learners from the same class will probably be at different reading levels
(Department of Education 2007:41).

The checklists enable the teacher to keep a record of his or her teaching goals for each grade level. The reading levels of each learner are tested at specific times:

- Half-way through Grade 1
- At the end of Grade 1
- Half-way through Grade 2
- At the end of Grade 2

There is a specific procedure that should be followed when using the checklist. It is essential that the teacher familiarises him or herself with the procedure before

commencing. It is recommended that the teacher spend about ten minutes per learner while assessing using the checklists (Department of Education 2007:41).

2.7.5 The Teacher's Handbook and the research project

The Teacher's Handbook is a very comprehensive guide that provides teachers with guidelines as to how to structure their classroom and learners. The Teacher's Handbook also provides the teacher with activities that can be done in order to enrich the learners' reading and writing experiences. Provision has been made for the various facets with regards to reading instruction. The control group was, therefore, given good reading instruction. The experimental group that participated in the research project also received the benefits of the Teacher's Handbook with the added assistance of the THRASS programme.

2.8 ENGLISH SECOND LANGUAGE LEARNERS

Unique phonetic sounds are the components that are found in each language. The phonetic sounds need to be learned by the speakers of that language. English second language learners will be using their knowledge and understanding of phonetic sounds in an attempt to learn the English language (Wright 1999-2011).

It would be essential that the teacher takes the pros and cons for each of the methods into consideration especially when designing a suitable phonics programme or method for English second language learners. Some of the programmes cannot be taught in isolation and need to be combined with other phonics methods or programmes if the programme is to be successful. The language level as well as the general knowledge of the learners also needs to be taken into consideration when selecting a suitable phonics programme or method for English second language learners.

The learners' success at school is determined by their ability to read, write and understand the language of instruction in schools. For many learners this language is English, even though their home language is different from the language of instruction. Therefore, a suitable phonics programme or method, such as the THRASS programme, could be the solution for learners to succeed in their language skills. This in turn will ensure success in all learning areas.

2.9 CONCLUSION

In this chapter the emphasis was placed on the literature in order to provide a profound explanation of each phonics method or phonics programme that is available to professionals who have been given the important task of teaching phonics to learners.

The literature has shown that professionals have a variety of possible methods to choose from. They could elect a phonics programme that uses the bottom up approach or they could elect the whole language approach that uses the top down approach. The professional could also opt to use a combination of these programmes in order to reach his or her desired goal which would be the attainment of appropriate reading and spelling levels for his or her learners.

Learners learning in a language that is not their home language will need a programme or a combination of programmes to enable them to acquire a good command of the English language. This will in turn also ensure that they will improve their reading and spelling levels and thereby obtaining success while they are at school as well as their learning beyond their school environment.

An in depth discussion of the THRASS Whole-Picture Keyword Phonics programme that will be used by the experimental group was provided in order to highlight the main distinguishing features this programme offers in comparison to other phonics programmes that are available. An in depth discussion of *Teaching reading in the early grades: A teacher's handbook*, the alternative programme used by the control group was also provided so that the two programmes could be compared. This gives the reader an idea as to how the two methods used differ from each other.

The next chapter will focus on the history of the English language which will address the difficulties encountered in the English language and provide reasons for these difficulties. The next chapter will also give a profile of the Grade 2 learner.

CHAPTER 3

A PROFILE OF GRADE 2 LEARNERS AND THE DIFFICULTIES THEY EXPERIENCE ACQUIRING ENGLISH AS A SECOND LANGUAGE

3.1 Introduction

The previous chapter dealt with the various phonics approaches that can be used in an attempt to improve reading and spelling abilities of Grade 2 English second language learners. The previous chapter gave an insight into the views of the specialists as to how phonics should be taught. This chapter will provide a brief history of the English language that will report the difficulties encountered in the English language as well as provide reasons for these difficulties. This chapter will also discuss the Grade 2 learner.

3.2 A PROFILE OF THE GRADE 2 LEARNER

The school years, also known as the middle years of childhood, range from the age of 6 to 11. The school years are where the child's central experiences take place. This is the time where the child's physical, cognitive and psychosocial development becomes paramount. It is also during this time that individual differences become more obvious. The child will also develop socially during this time as they come into contact with other children (Papalia & Feldman 2011:313).

The grade 2 learners who participated in the study ranged in age from 6 turning 7, to 8 turning 9. The age of the learner depended on the age the learner started school. Some learners were in need of repeating a grade and that also affected their age.

The child will be viewed from an all-inclusive point of view in order to report on the learner's whole development. The following aspects will be elaborated upon, physical, cognitive, emotive and behavioural development.

3.2.1 Development

3.2.1.1 Physical development

Physical development is imperative to the life of the young child as it enables him or her to explore and interact with his or her world. The physical growth of the child begins when the child begins to use his or her muscles thereby improving the

strength of his or her muscles. The child will also progressively improve his or her coordination. Muscular control is the initial step in this process. A child who engages in physical activities will find him or herself riding a bicycle, jumping on a trampoline, grasping a block or using a pencil to colour in a picture (Brotherson 2006:1).

Motor development relates to physical growth, or to the growth ability that enables children to utilise their bodies as well as their physical skills. Motor development has been determined as the procedure where a child obtains movement patterns and skills (Brotherson 2006:2). Motor development takes place in the form of gross motor and fine motor skills. Gross motor skills involve the use of the large muscle groups that are located in the arms and legs. Gross motor skills include climbing, jumping and running. These activities enhance muscle coordination and thereby ensuring that motor abilities improve during this stage. Improved coordination together with children's cognitive and social development prepares them to participate in games that contain rules that need to be adhered to. At the age of eight most children are equipped with the necessary skills that will enable them to participate in team sports (Croft 2008:3).

The fine motor skills are the small muscles groups located in the arms, hands and fingers. The capacity for the child to coordinate these muscles and improve their skills such as drawing, typing and using scissors enhance a great deal during this stage of development. The development of the brain also contributes to the increase in fine motor skills. At around the age of 6 messages from the brain reach the muscles quicker and the child is able to exercise more control as the amount of electrical impulses from the brain speed up (Croft 2008:4).

Some learners who participated in the study received occupational therapy in order to develop gross and fine motor muscle control. The occupational therapist is a trained professional who is able to prescribe meaningful activities that will enable the learner to have his or her specific problems addressed. The learner will then be in a position to attain a maximum degree of independence. The learner will also find that his or her quality of life will be enhanced (Späth 2013).

Once a child has received the required amount of therapy, determined by the therapist, the child will be able to show better functioning within the classroom. As the fine motor muscles, the small hand muscles, strengthen the learner will find it easier to participate in activities, such as, drawing, using scissors and stringing beads. Academic tasks that become easier include writing, turning pages, and using the computer. Dressing becomes easier as the learner is able to button his or her shirt, use a zip as well as use utensils with the required dexterity (Arky 2012).

The gross motor skill development includes the major groups that are responsible for maintaining balance, strength and endurance, and coordination. Low muscle tone will affect the learner's ability to sit erect and alert which is also important for class participation and for the fine motor skills that are required for handwriting. The gross motor muscles will also assist the learner when climbing stairs, riding bicycles or when he or she is required to participate in a team sport like soccer or rugby (Arky 2012)

The Grade 2 learner's self-confidence improves once these barriers have been removed. The learner finds that the tasks or activities he or she is required to do in class, on the playground or sports field, and even at home become easier. These learners start to take risks and participate in other areas of their learning that are not easy for them, such as language barriers that so many of our learners encounter on a daily basis.

3.2.1.2 Cognitive development

Jean Piaget (1896-1980) was a Swiss biologist who observed his own children as they used processes with which they made sense of their world. He ultimately formulated a four-stage model as to how the brain will process new information that is encountered by the child. He postulated that all children's development will pass through the four stages and they will do so in the same order. The four stages are comprised of (Learning-Theories 2007-2012):

- **Sensorimotor Stage** (Birth to age 2). During this stage the child will begin to develop reflexes, habits and hand-eye coordination. The child will establish object permanence which means he or she will learn that an object exists

even though he or she cannot see it. Piaget referred to the children in this stage as “little scientists” as the child learns through experimentation and creativity. The child also learns about his or her environment through trial and error experimentation.

- **Preoperational Stage** (Age 2-7 years). The child in this stage will start to develop the ability to represent objects with images and words. During this stage the child will also develop language skills and imagination. Children in this stage use imitative play as a means to learn about their world. Their reasoning during this stage is more intuitive than logical.

The learners who participated in the study would find themselves at the end of this stage and entering into the next stage.

- **Concrete Operational Stage** (Age 7-12 years). The child in this stage will develop the fundamentals of logic which include the ability to sort and classify objects and they develop an understanding of conservation.

The learners who participated in the study would find themselves in this stage. This means that the learners should be able to perform their required activities at a much higher level than what they could in the previous, preoperational, stage. This means that they should have an improved understanding of causality, spatial concepts, inductive and deductive reasoning, categorisation, conservation, number and mathematical concepts (Papalia & Feldman 2011:336-337).

Spatial reasoning develops during middle childhood. Spatial reasoning has to do with the child’s ability to draw conclusions about distance and direction by using clues provided to them from the environment. The child has the ability to determine the distance of the object by observing the size of the object. The child would reason that a small object is further away than a larger object. The child in this stage will also be able to give directions to another person from the other’s vantage point rather than his or her own. The child also develops spatial reasoning skills where he or she is able to represent places from multiple perspectives which aid the child in forming mental images of his or her environment. This means that child is able to form credible maps of his or

her neighbourhood that other people are able to comprehend, where relevant landmarks are included with proportional distances between the places (Oswalt 2010).

During this stage the child starts to learn the concept of causality, the idea of cause and effect. The child now understands the connection between his or her actions and of the possible consequences that follow. This understanding will enable the child to be alerted to dangers. A child in the preoperational stage may not have the ability to determine that running in front of a moving swing may cause him or her harm. At about the age of six or seven the child is able to visualise and predict cognitively of the impending repercussion of being in the route of a moving swing. Injuries during this stage will still occur. However, the child now has a greater understanding that if he or she takes a physical risk, there is a possibility that he or she will sustain an injury (Wellhousen 2002:116).

According to Piaget (1952, as cited in Papalia & Feldman 2011:337) categorisation enables the learner to think in a logical way. Categorisation includes seriation, transitive inference and class inclusion where each of these abilities progressively develops between early and middle childhood. Seriation is understood by the learner when he or is able to organise objects in a sequence according to one or proportions, for instance, colour or size of the object. By the age of about seven or eight the learner is able to arrange a group of sticks on sight according to their size. Piaget and Inhelder (1967, as cited in Papalia & Feldman 2011:337) describe transitive inference as the ability to deduce the connection between two objects by taking into consideration the connection there is between each of them as well as the third object. Class inclusion involves the ability of the learner to see the connection that lies between a whole and its various parts (Papalia & Feldman 2011:337).

The learner's ability to conserve number, length, and volume of liquids develops at about the age of six or seven. Conservation means that the learner is able to grasp the idea that the quantity remains constant despite the

changes that may occur in its appearance. Conservation of matter develops at about the age of seven or eight. This means that the learner is able to take a ball of clay and divide it into ten little bits with the knowledge that the amount of clay stays the same. The learner also knows that he or she will be able to roll the clay back into a single ball of clay and that the ball of clay will look the same as it did in the beginning. This is known as reversibility. The last stage of conservation, conservation of area, is grasped at about the age of nine or ten (Boeree 2006).

3.2.1.3 First language development

According to the Oxford Dictionary (2012) language can be defined as a human ability that enables people to communicate using words in an organised and predictable way in order to convey either a written or spoken message. Language consists of language development and language acquisition that can be defined as follows.

Language development can be defined as a procedure that begins early in the child's life where the child will go on and acquire effective communicative skills where he or she is able to communicate in either written or spoken words. A person's language development starts at birth and continues throughout his or her life. The child begins by remembering some basic words without the related meanings. As the child becomes older he or she will learn that a connection exists between the words learnt and their related meanings. The child also learns to form sentences where words are joined together in order to form coherent meaning. The older child will increase his or her vocabulary as new words are learnt. This means that the child will connect new meanings the new words learnt (HighReach Learning Inc. 2007).

A minority of people around the world grow up learning to speak only one language. This type of language seems to have to been studied the best by many researchers. The academic field that studies this type of language acquisition is called child language acquisition or it is referred to as first language acquisition (Orega 2009:3).

First language development takes place in a sequence. This sequence will be discussed below.

Pre-linguistic stage: Two month old babies who have been exposed to oral language are able to identify patterns of intonation of their first or native language. Babies are able to hear sounds while in the womb from around 7 months and in this way they become accustomed to the sounds of language as well as other sounds from an early stage. This could be the reason why babies are able to correctly give the patterns of intonation before they are able to actually utter words. It is interesting to note that babies in this stage are able to distinguish between language sounds and nonlinguistic sounds irrespective of whether that sound is from his or her first language.

Babbling Stage: This stage occurs from around 4 to 8 months. During this stage babies master numerous sounds consistently. Identical consonants seem to be produced by babies irrespective of the language they are exposed to. These sounds include: b, d, f, h, j, k, m, n, p, s, t and w. The less frequent consonants produced during this stage include: l, r and v. This suggests that babies are predisposed to language during this stage.

The one-word stage: This stage takes place from about 9 to 18 months. Babies start to realise, at about a year, there is a connection between words, sounds and their meanings. During this stage babies start to say their own words that consist mainly of verbs and nouns. They aspire to utter more or less fifty of the most familiar words that occur in their ordinary situations. This occurs between the ages of 12 and 18 months. The first words spoken vary in pronunciation where some words resemble adult-like results, while other words may be so contorted that only family members are able to comprehend what they are saying.

The two-word stage: This stage starts at around 18 months and lasts to about 24 months. Fast mapping occurs during this stage when children understand that objects have names. During this stage, children start joining words and use two words to express their thoughts and feelings. They use a word order that is reasonably regular and they seem to base their sentence structure according to semantic associations as opposed to syntactic associations found in adult speech. The child will speak “telegraphically” during this stage. The child will omit purposeful words like ‘in’ or ‘the’. The

child will not pay particular attention to endings of words such as –ed or –s. The child will use verbs, adjectives and nouns to deliver meaning. The child is able to put a phrase of words together using a limited vocabulary in order to communicate meaningfully. The child understands far more than his or her language production allows.

The early multiword stage: This stage begins at about 24 months and ends at around 30 months. Children tend to overgeneralise different grammatical rules that they learn. For example, when the child learns that an ‘s’ is added to the end of a word to indicate a plural word, the child will apply this rule to all words and say *mouses* and *tooths*. More complex syntactic structures are acquired by the child during this stage; however, they have not reached adult grammar patterns. Children start asking questions at about the age of 2 to 4 years where they place words such as *what* and *where* at the start of the sentence (Denham & Lobeck 2013:37-40).

Children aged 3 to 4 years: 75 to 80 percent of what children say is understood by others. Children are able to say their names and surnames. Children also understand concepts such as over, on, under and in. Children also use words such as later, soon and now. Children ask questions using words like why, who, where and what. Children are able to construct 3 to 5 word sentences. Children enjoy repeating words and sounds. Children are able to recognise common sounds from their environment. Children are able to recognise red, yellow, blue and green colours.

Children aged 4 to 5: Children are now able to recognise letters they have been taught and may even be able to print their own name. Children are able to distinguish familiar words from their environment such as, ‘stop’ and names of shops. Children are able to communicate using rather complex sentences. Children at this age learn their address and their telephone number. Children ask and answer where, what if, why, who and what questions. Children are now able to name at least eight colours and name at least three shapes. They are able to follow two unrelated instructions.

Children aged 5 to 6: Children are able to communicate using correct grammar and word form. Children are able to write their first name, some letters of the alphabet and some numbers. Children also learn to read some easy words (Oesterreich 2004).

Middle childhood: Children find that their language skills continue to expand during this stage. They are able to comprehend and deduce information that is written and said. They are also able to make themselves understood. These activities can be rather daunting for children who are second language learners (Papalia & Feldman 2011:349).

The Grade 2 learner would have progressed through to the stage of 5 to 6 year olds and entering middle childhood of their first language development. Many children would be required to start acquiring and learning in a second language while they have not reached the necessary competency level of their first language. The stages of second language development will be elaborated upon in the next section.

3.2.1.4 Second language development

Once the first language has been acquired and a person has taken it upon him or herself to learn an additional language, where reference is made to second language acquisition in the academic field. It is the aim of this academic field to gain an understanding of the diverse and intricate influences and circumstances that add to the bewildering array of potential consequences that accompany acquiring an additional language in various situations (Orega 2009:2). The six stages that need to be considered in second language acquisition are:

The pre-production stage: This stage is also known as “the silent period”. During this stage the person acquiring a new language will simply take in the new language but will not speak it as yet. The duration of this stage depends on the individual but often lasts about six weeks.

Early production stage: The person will now begin speaking the additional language. The person begins by saying short words and listening. The emphasis of this stage is still on absorbing and listening to the new language.

Speech emergent stage: The person finds that his or her speech becomes more regular where he or she is able to use longer words and sentences. The person depends greatly on background hints and familiar issues. The person will find that his or her vocabulary will increase during this stage and that mistakes will be reduced particularly in regular or duplicated communications.

Beginning fluency stage: Communication during this stage becomes reasonably effortless in social situations with small amounts of mistakes. The person will experience difficulties expressing him or herself in unfamiliar situations and in using academic language as he or she would not have mastered the required vocabulary and applicable expressions.

Intermediate fluency stage: During this stage the person demonstrates effortless communication skills in social situations. The person is able to speak more effortlessly in unfamiliar situations and in educational areas. However, the person will still experience some difficulties when it comes to word familiarity and applying unfamiliar expressions. The person will be able to communicate with minimal mistakes and he or she will have the ability to use higher order thinking skills when communicating in his or her second language. The person will be able to contribute his or her opinion to the conversation or consider a problem.

Advanced fluency stage: During this stage the person will now be able to communicate effortlessly in all situations. The person will also demonstrate the ability to plan effectively in new situations as well as when the person comes into contact with new educational facts. The person might still speak with an accent and use vernacular terms erroneously at times, however, the person will be in essence communicating easily in his or her second language (Robertson & Ford 2008).

The pace at which the learner is able to acquire a second language is determined by aspects such as internal or external attributes. Internal aspects include the following:

Language aptitude – Dörnyei and Skehan (2003); Swayer and Ranta (2002) (as cited in Paradis 2011:214) describe language aptitude as a type of intelligence that is congenital to the learner, where language aptitude is connected to but not equivalent to general intelligence that is calculated as an IQ.

Transfer of constructions from L1(first language) to L2 (second language) – Research conducted by Chondrogianni (2008), Unsworth (2005), Zdorenko (2010), Zdorenko and Paradis (2011) (as cited in Paradis 2011:215) on the various structures of language, for instance, definite and indefinite articles, clitic pronouns, object scrambling and auxiliary verbs found that L1 transfer in

child L2 acquisition was present, either structural patterns were being transferred, or in instances where the L1 and L2 share grammatical aspects that are similar.

Cognitive maturity depicted by chronological age – It was discovered through research by Collier (1987), Roessighm, Kover and Watt (2005) (as cited in Paradis 2011:215) that learners who acquire their second language during middle-childhood were more beneficial in learning early academic English skills, extending into vocabulary building. Research conducted by Golberg, Paradis and Crago (2008, as cited in Paradis 2011:215) found that learners who started learning their second language after five years of age build vocabulary at a faster rate than learners who started learning English as their second language younger than five years of age.

External aspects are mainly characterised by the quantity and quality of the target language the learner receives.

Quantity – quantity refers to the overall length of exposure to the language the learner receives. The time the learner is exposed to the language could vary from school, his or her community, and at home (Paradis 2011:216)

Quality – quality refers to the different experiences the learner has with various first language speakers where they are able to gain language rich experiences through reading, through interacting and conversing with first language speakers. These interactions could influence the rate at which the learner acquires his or her second language (Paradis 2011:216).

- **Formal Operational Stage** (Age 11-15 years). The child in this stage develops the ability to hypothesise, test and to reevaluate his or her hypotheses. The child will start thinking in a formal systematic way (Newkirk 2009).

This study accentuates English as a second language and the Grade 2 learner who is required to learn in a language that differs from his or her first language. The second language learner would be required to be in the intermediate fluency stage in order to communicate effortlessly in all social situations. Many Grade 2 learners find themselves in the beginning fluency stage while attempting to master the work required at a Grade 2 level. Some Grade 2 learners do not have the necessary language skills that are required to meet the outcomes of the grade. The Grade 2

learner may lack the internal or external attributes that will hinder his or her ability to acquire English as a second language.

3.2.1.5 Psychosocial development

The psychosocial development theory of Erik Erikson's is probably one of the best known personality theories in psychology. Erikson was of the opinion that our personality develops in a series of stages. Erikson's theory gives us an indication as to how our entire lifespan influences our social experiences (Cherry 2012).

The eight stages that range from birth to death are divided up into broad age ranges. The stages are:

1. Infancy: Birth to 18 months old

Basic Trust vs. Mistrust – Hope

The importance of the mother and father's nurturing abilities, especially in terms of visual contact and touch, become paramount during the first stage of life. The child will in turn learn to become optimistic, will learn to trust, develop confidence and will feel secure if the child is cared for and handled in a proper manner. A child who does not experience trust, he or she may in turn feel insecure, worthless, and may learn to mistrust the world in general.

2. Toddler/Early Childhood Years: 18 months to 3 years

Autonomy vs. Shame – Will

It is during this stage that the child is presented with the opportunity to form his or her self-esteem as well as his or her independence as the child is exposed to and learns new skills and differentiates between what is right and what is wrong. A child who is well-cared for will become confident, and presents him or herself with pride as opposed to shame. The "terrible twos" form part of this stage where the child will experience emotions such as defiance, temper tantrums, and stubbornness. During this stage the child may feel vulnerable and may feel shame and low self-esteem at times when certain skills are difficult to learn.

3. Preschooler: 3 to 5 years

Initiative vs. Guilt – purpose

This is a time where the young child learns to copy the adults around them taking initiative and creating play situation to do this. The child is able to play out various roles in an experimental world where they are able to play out what they believe it means to be adult. The child will also start exploring his or her world and tend to ask to the question: “WHY?”

During this stage the child will find him or herself in an internal struggle that needs to be resolved in order to discover his or her “social role identification”. Guilt may be experienced when the child feels frustrated over his or her natural goals and desires.

The basic family is the most significant at this stage.

4. School Age Child: 6 to 12 years

Industry vs. Inferiority – Competence

This stage is often named Latency as the child becomes capable of learning, creating and achieving copious amounts of skills and knowledge, and therefore is able to develop a sense of productiveness. During this stage the child will develop social skills as he or she will experience feelings of inadequacy and inferiority especially when they compare themselves to their peers. The child may experience problems in terms of capability and self-esteem.

The child’s world begins to expand and therefore forms significant relationships with his or her school and neighbourhood. Parents now share their role of authority but remain an important authority figure to the child.

The learners who participated in the study would find themselves in this stage of psychosocial development. Erikson was of the belief that during this stage it would be imperative for the child to attain an awareness of industry. To develop an awareness of industry means that the child will engage in tasks that require their eagerness to build skills and an opportunity to execute work

that is meaningful. The predicament of this stage is that the child could achieve an awareness of competence or achieve a combination of its contrary skill, which is, inferiority. Inferiority results in numbness of thoughts and actions that prevent the child from executing work that is meaningful. In order for the child to attain an awareness of industry, the child should be encouraged to construct articles with his or her neighbours and or peers in the classroom (Erikson 1959 as cited in Green & Kropf 2009:85). It also imperative that child's physical and social world is augmented at this time (Erikson 1982, Newman & Newman 2005, as cited in Green & Kropf 2009:85-86).

5. Adolescent: 12 to 18 years

Identity vs. Role confusion – Fidelity

Up until this point development has been dependent upon what has been done to the person. The development that takes place now depends mainly on what the person does. The adolescent at this stage is in a struggle to discover his or her own identity while at the same time battling with and negotiating social interactions that require the adolescent to “fit in” as well as developing a sense of ethics and distinguishing between what is right and wrong.

The adolescent who is unsuccessful in this stage will experience role confusion and disorder. The adolescent begins to develop a strong attachment and dedication towards ideals, causes and friends.

The last three stages of psychosocial development will be mentioned but not elaborated upon as they are not relevant to the child in the school situation.

6. Young adult: 18 to 35 years

Intimacy and Solidarity vs. Isolation – Love

7. Middle-aged Adult: 35 to 55 or 65

Generativity vs. Self-absorption or Stagnation – Care

8. Late Adult: 55 or 65 to death

Integrity vs. Despair – Wisdom

(Learning Theories 2007-2012a).

3.2.2. Physical aspects

This section will address the nutritional needs and various health issues encountered by the Grade 2 learner. Nutrition plays an important role in the child's ability to learn in the class. The learner's nutrition will influence his or her behaviour on the playground. For these reasons, it has been decided to include the value of nutrition to this study.

The Grade 2 learner is required to master numerous outcomes in order to progress to the next grade. A learner who is often absent from school due to illness may not meet these requirements and will therefore not be able to progress to the next grade. It has been decided to include the numerous health issues that some learners encounter in order to gain a better understanding of the health problems that could prevent the learner from attaining his or her optimal level of development.

3.2.2.1 Nutrition

It has become apparent through brain research that what the child eats will have an intense effect on the child's ability to learn in the classroom and how he or she will behave on the playground. This becomes discernible when we take a look at the young child who does not have the maturity required to resist impulses when under stress. The young child will experience difficulties regulating him or herself as well as learning when he or she is under emotional stress. The same is true for the young child when he or she is under nutritional stress (Gurian 2011:89). For these reasons, it has been decided to include the various nutrients required to sustain a healthy, active and learning body of the school going child. In my years as a Grade 2 teacher, I have often noticed that the nutritional needs of the young learners are being neglected. Parents and teachers need to be made aware of the nutritional value that is imperative to the young developing learner.

Our bodies use chemical substances called nutrients in order to keep our bodies healthy, well maintained as well as enable our body to restore tissues. Nutrients also

support the cells in sending messages so that essential chemical reactions can take place. These chemical reactions enable us to breathe, move, think, see, smell, taste, eliminate waste, hear, smell as well as all functions that come naturally to a living body (Rinzler 2011:11). Nutrients that are essential for our bodies can be divided into water, carbohydrates, lipids, proteins, vitamins, and some minerals (Whitney & Rolfes 2008:6). Vitamins and minerals are essential nutrients that ensure that the human body is able to function optimally. A diet that is considered to be balanced will contain the correct amounts of vitamins and minerals (Sandhyarani 2000-2012).

For many school going children their day begins by eating toast or having a bowl of cereal. These foods are high in carbohydrates which reduce the child's ability to learn. A high carb diet is acceptable if the child is going to engage in physical activity as the function of carbohydrates is to produce quick energy in order to assist the child while engaging in physical activity. It is not suitable for a child to take in high-carb foods in the morning if the child will be sitting on a bus or car and then expected to sit at his or her desk in the classroom (Gurian 2011:89-90). Carbohydrates that consist of a high glycemic index, white bread and refined sugars for example, are easy-release carbohydrates that instruct the brain to stack the body with glucose. This means that for a short period of time serotonin is quickly accumulated which will allow the child to feel calm momentarily. This momentarily feeling of calm is achieved when the blood sugar is surged through the body. Inevitably the blood sugar will plunge causing the child to feel either low or may become jittery (Gurian 2011:90).

It is imperative that the growing child receives the correct amount of nutrients. The term 'malnutrition' is used to refer to both under-and over nutrition (Swart, Sanders & McLachlan 2008:130). The lives of millions of children are affected by malnutrition in South Africa (Swart, Sanders & McLachlan 2008:131). It has been found that consequences of deprived nutrition start in utero. Some examples of factors that affect intrauterine growth include: the mother's nutritional state before conception, diarrheal disease, intestinal parasites and respiratory infections. Smoking will inhibit the newborn from attaining their full growth potential (Behrman, Alderman & Hoddinott 2004:3). Grantham-McGregor, Fernald and Sethuraman (1999, as cited in Behrman, Alderman and Hoddinott 2004:4) determined that in severe situations

malnutrition that occurs in early childhood frequently results in cognitive development. It has been found that learners who are malnourished will be more inclined to score poorly on cognitive functioning tests. These learners have inferior psychomotor development. They experience difficulties that require fine motor skills. These learners are not very active and therefore they do not interact within their environments. Grantham-McGregor, Walker, Chang and Powell (1997, 1999 as cited in Behrman, Alderman and Hoddinott 2004:5) noted that these learners are not able to acquire skills at normal rates. Yaqub (2002, as cited in Behrman, Alderman and Hoddinott 2004:5) proposed through organised experiments with animals that the effects of malnutrition cause permanent damage to brain development where the neural fibers do not become insulated. Young learners are therefore most susceptible when it comes to impaired cognitive growth (Behrman, Alderman and Hoddinott 2004:5).

Two national nutritional surveys have been conducted in South Africa in the last ten years. The National Food Consumption Survey (NFCS) took place in 1999 and in 2005 the National Food Consumption Survey-Fortification Baseline (NFCS-FB-I). When the results from the surveys are compared it becomes evident that stunting and overweight persist to be the most common nutritional disorders in children where almost one in five is affected. There has been a decrease in the national average from 21.6% to 18% where an overall improvement has been noted in rural areas from 26.5 to 20.3% (Combating Malnutrition in South Africa 2008:8).

A study was conducted at the University of Cape Town by Lambert, Sharwood and Lambert (2006:439-444) to determine the incidence of obesity and overweight children aged 6 to 13 years in South Africa. They chose random primary schools from five South African provinces and selected random socio-economic groups. Their study consisted of 5 611 males and 4 584 females totaling 10 195 children. The results from the study show there were substantial differences in height and mass that occurred between the various ethnic groups and genders of the participants. This trend did not become apparent for the BMI values. The obesity incidence of boys from the sample was 3.2% and 4.9% for girls. The overweight incidence was 14.0% for boys and 17.9% for girls. The values obtained only differed slightly when each ethnic group was adjusted to the demographics of South Africa.

The incidence of obesity and overweight among boys was 2.4% and 10.9% respectively. For girls the incidence of obesity and overweight were 4.8% and 17.5%, respectively. The researchers came to the conclusion that South African children are indicating trends of obesity and overweight values similar to those found in developed countries about 10 years of age. It becomes apparent that intervention strategies need to be developed for the increasingly sedentary lifestyles of South African children (Lambert, Sharwood & Lambert 2006:439-444).

The school going child should not be consuming foods such as doughnuts, rolls, pasta or other sugary foods during the first half of the school day. Brain-based research has indicated that these types of foods impair brain functioning where productive learning and testing will not take place after these foods have been consumed by the child. These foods should therefore be discouraged in lunchboxes brought to school or children buying these foods at the tuck shop. The most suitable time for the child to consume these types of food would be in the afternoon when the child is to engage in physical activity. These foods should not be consumed before then (Gurian 2011:90).

Vitamins and minerals are referred to as micronutrients as they are required in relatively small quantities when compared to nutrients such as carbohydrates, proteins, fats and water (Lieberman & Bruning 2007:15). Vitamins can be divided into two different groups. These groups include water-soluble (the B vitamins and vitamin C) group as well as fat-soluble (vitamins A, D, E and K) group (Boyle & Long 2007:6). These vitamins will be discussed briefly.

The fat-soluble vitamin D ensures strong bones and teeth. Vitamin E aids the body in fighting toxins. Vitamin E is a dominant antioxidant. Vitamin A (retinol) is good for eyesight, growth, appetite and taste (Brandt 2011). The Food Consumption Survey conducted in 2005 discovered about one in seven children (14%) were severely vitamin A deficient. 17% of children living in 'tribal' areas were most affected (Berry, Hall & Hendricks 2010:2). Vitamin A builds strong bones, maintains healthy skin and preserves soft tissues as well as mucous membranes (Cross 2011). Vitamin K is needed by the body in order to clot blood, forms and repairs bones and it may help in the prevention of osteoporosis. This vitamin is important for the prevention of arterial

calcification, varicose veins and cardiovascular disease. Other benefits of this vitamin include the prevention of brain health problems, such as, dementia (Mercola 2010).

The water-soluble vitamin B1 (thiamine) is beneficial to the nervous system, digestion, muscles, heart and alcohol-damaged nerve tissues. Vitamin B2 (riboflavin) is good for growth, skin, nails, hair, sensitive lips and tongue, eyesight, the breakdown of protein, fat and carbohydrates. Vitamin B6 (pyridoxine) prevents skin conditions, nerve problems and helps the body absorb protein and carbohydrates. Vitamin B12 (cobalamin) makes red blood cells and helps in the formation of the nerves. Vitamin C aids the immune defense system; it protects the body from viruses and bacteria. It heals wounds, reduces cholesterol, prolongs the lifespan of cells and prevents scurvy (Brandt 2011).

Iron is a mineral that ensures optimal growth, promotes skeletal development, aids cellular immunity and assists cognitive functioning. According to the research conducted by the National Food consumption survey (Labadarios & Louw 2008:262) it was discovered that a poor iron status seemed to have increased when results were compared with previous national data obtained and that the prevalence shown amongst children should be viewed as a cause for concern. The results should, however, be viewed with caution and should be considered keeping the limitations of such comparisons in mind (Labadarios & Louw 2008:262).

Zinc is a mineral that ensures that normal growth takes place, skeletal development is promoted and assists neuropsychological function. Nationally, 45.3% of children had an inadequate zinc status and children of this age group (1-9 years) should be considered to be at risk of zinc deficiency. These findings should be interpreted within the context of the sample sizes that appear in the relevant section of the report (Dhansay, Marais & Labadarios 2008:264).

Other minerals include calcium and magnesium. Calcium is essential for the body as it is used to ensure that the body has strong bones and teeth. This vitamin also aids nerve functioning, muscle contraction and plays an important role in blood clotting.

Magnesium converts food into energy; it repairs cells, builds strong bones, teeth and bones. It is responsible for regulating the temperature of the body (Brandt 2011).

The Department of Health plays a key role in the improvement of children's nutritional levels. The department has the following targets they would like to reach by 2014:

- Decreasing hunger from 52% to 30% with the aid of data obtained from the national food consumption survey.
- Reducing undernutrition from 9,3% to 5% in children.
- Stabilise the Consumer Price Index for poorer people (this determines the price of food).
- Launching community, institutional and school gardens whereby 30% of poor households will be able to produce their own food and may expand their income.

In 2010, the department repeatedly came up with approaches in order to expand on the nutritional position of communities (Government Communication (GCIS) 2010/11:243).

Suitable food choices of the school going child in the morning for breakfast and snacks during the day should consist of foods containing high-fibre, protein, milk, yoghurt (which includes soy milk). These foods avoid encouraging the serotonin predicament in the brain and blood that is caused by carbohydrates. These foods aid the learning ability of the child by promoting brain cell growth. These foods will assist the child in staying alert and will challenge the brain to develop (Gurian 2011:90-91).

The learners who participated in the study did not display good eating habits. A lot of the learners do not eat breakfast before they come to school and land up buying food from the tuck shop which includes sweets, chips and fizzy drinks just before their school day begins. This impairs their ability to concentrate for sufficient amounts of time and therefore their learning becomes reduced. The learners are also inclined to have money for lunch as opposed to bringing a healthy packed lunch

from home. It seems that parents do not take the time to ensure that their child has sufficient nutrients to see them through the school day.

3.2.2.2. Health

The abolishment of the apartheid era gave the post-apartheid government an opportunity to develop a health care system that is capable of delivering quality and efficient health care to all citizens that is provided in a caring environment. The South African government has since made legislative alternations as well as introduced new policies where the realization of the right of citizens of access to health caregivers could be facilitated (Shisana, Simbayi, Rehle, Zungu, Zuma, Ngogo, Jooste, Pillay-Van Wyk, Parker, Pezi, Davids, Nwayanwe, Dinh & SABSSM III Implementation Team 2010:xvii).

An imperative component in the avoidance of child mortality is immunization coverage as it is connected with child survival as well as infant and under-five mortality rates. South Africa has seen an increase in immunization against measles between 2001 and 2009, from 68,5% of children younger than a year old in 2001 compared to 2009 where 98,3% of children younger than a year were immunised. An increase in the number of children under a year of age who received all their primary vaccines for TB, diphtheria, whooping cough, tetanus, polio, measles, hepatitis B and haemophilus influenza from 66,4% in 2001 to 95,3% in 2009 (Government Communication (GCIS) 2010/11:240).

An estimated 280 000 children younger than 15 years of age are reported to be living with HIV infection South Africa. This number of children is the highest in the world (UNAIDS 2008 in Shisana et al. 2010:5). According to Shisana, Mehtar, Mosala, Zungu-Dirwayi, Rehle, Dana, Colvin, Parker, Connolly, Dunbar and Gxamza (2005 as cited in Shisana et al. 2010:5) the estimated HIV prevalence for children 2-14 years was 3,3% from a population-based survey. Most of the children who had acquired HIV under the age of 15 had done so through mother-to-child transmission. There is a 20%-45% chance of HIV being transmitted where the mother is HIV positive. The risk of this occurring can be reduced by about 2%-4% where PMTCT measure could be implemented successfully (WHO 2004, as cited in Shisana et al 2010:5).

The Integrated Management of Childhood Illnesses (IMCI) endorses the improvement of child survival as well as child health as a measure of the National Plan of Action of Children. South Africa is in a fortunate position in that the doctors and nurses are well qualified in order to treat all ailments by utilizing the IMCI Strategy. Pneumonia, diarrhea, malaria, malnutrition and meningitis are ailments that can be easily managed. The IMCI Strategy in South Africa has been modified in order to include HIV assessment and its classification. The strategy attempts to incorporate all involvements that are relative to children in order to create a platform of upkeep that can be accessible to each child (Government Communications (GCIS) 2010/11:244).

The learners who participated in the study remained relatively healthy during the course of the research process. Learners were absent due illnesses such as asthma, common cold and other childhood diseases common for this developmental stage such as chickenpox and measles were reported. The learners were present for the majority of the school days. Learners who missed out on work received the opportunity to attend extra classes so that they could 'catch up' on any work dealt with during the time of their illness.

The next section of this chapter will provide a brief history of the English language. It is imperative that this section be included in this chapter as English second language learners experience difficulties acquiring English. This section will give an explanation as to the difficulties these learners experience and why they find learning English to be such a daunting task.

3.3 AN OVERVIEW OF THE ENGLISH LANGUAGE

The framework for written and oral language can be found by investigating how words and language have advanced into the practices used today to teach reading and writing skills (Teele 2004:47). According to Adams and Bruck (1995, as cited in Teele 2004:47) the earliest types of written records came in the form of pictures where each picture corresponded to a word or to an idea. A logographic system of writing was established by the Sumerians of ancient Mesopotamia, which consisted of several individual pictures which were then translated into words and in turn translated into oral language. The logographic system changed into the syllabic

system of writing. The one problem that was encountered with this system – a problem that still persists today – is that the sounds and the symbols were not always shown in picture form.

The English language was the first European language to be written down. English came about as a result of interactions between the Britons, Celts, and Romans in the first centuries A.D. Old English began changing as far back as A.D 450 when the Germanic tribes (Angles, Jutes and Saxons) invaded the British Isles, and many new Germanic words were introduced. St Augustine brought Christianity to Britain in A.D 600 and many Latin words were included in the English language (Teele 2004:47-48).

William the Conqueror invaded the British Isles in 1066, and with him came the influence of Norman French to the English language. Middle English flourished from 1400-1550. Modern English has been divided into two different groups, namely, Early Modern English and Contemporary English. Early Modern English developed during the Renaissance from 1550-1700 and it is a version of the language that we willingly identify as English. As this language expanded many new words were introduced from Greek and Latin. Contemporary English dates from 1700 to present and is the English that is currently spoken (Bear, Invernizzi, Templeton, & Johnston 2000, as cited in Teele 2004:48).

The American Revolution in 1776 brought about American English. English had become a world language from the earliest part of the 20th century to the present. The spelling of words, vowel sounds and patterns, as well as the pronunciation of words have been directly influenced by all these historical periods and the words have evolved from the first century A.D right up to the present day (Teele 2004:48).

3.3.1 Regular and Irregular languages

In regular language, such as Spanish, Finnish and Italian, the links between the letters and the sounds that they make are very consistent. In other words, what you see is what you would say, which makes them phonic languages. English is however an irregular language as the links between the sounds and the letters have been affected by the historical events that have taken place and this has resulted in long-

term changes with regards to speech and pronunciation. This means that phonics will work most, but most certainly not all the time. Instead, the person will have to interpret what the letters tell us as an alternative to simply translating letters into sounds and sounds into letters (Bald 2007:2-3). Teachers will have to take care when presenting phonics to the learners so that they do not become confused when they encounter words where the letters do not behave as they should. Main causes and some examples of irregularities in English are:

- English, like all other languages that are in use, is in a constant state of being modified as time goes by. Language will differ slightly from one generation to the next where the language will appear to be ‘advanced’ and ‘conservative’ at any given time. These forms could belong to a region, to an education or to class of dialects. The changes that occur in the language take place at each level:

Lexical level – At this level new words need to be added to the vocabulary in order to denote fresh things or notions. Some words may be discarded as they are no longer needed by the community.

Semantic level – At this level it is found that the grammatical structures as well as vocabulary changes have taken place over time.

Phonological level – At this level it becomes apparent that pronunciation specifically is being altered and differs from region to region and from one community to another (Freeborn 1998:xi-xii).

- English became flooded with French influences in the 150 years following the Norman conquest of 1066. About one-third of English words are reflected by this. For example, the word *table* makes perfect phonic sense in French, where “/” is pronounced before “e” (Bald 2007:2-3).
- Over the centuries when English first began to be written down, several of the letters used to be pronounced, such as the “k” in the word *knight*. The letter is no longer said, however, the spelling of the word has been retained (Bald 2007:2-3).
- There was a change in the way vowels were pronounced in the late Middle Ages. Some words are spelled the way they were before the change occurred, which means that vowel sounds are not always written as we now speak them. The most common example is the word *was* (Bald 2007:2-3).

- All the long vowel sounds spoken in English in the Midlands and in the South of England underwent a shift in the way they were pronounced between the late 14th century and the late 16th century. It is uncertain as to why the shift occurred. No other shift has been recorded or noted at any other time in history. This event became known as the Great Vowel Shift (GVS) (Freeborn 1998:293).

Some of the changes that occurred can be found in Middle English (ME) words where the following words contained long vowel sounds. The pronunciation of the words changed due to a higher ‘shift’ required where articulation is produced in the mouth, or due to the fact that new diphthongs were formed. Some examples include: *flod* (Middle English) to *flood* (Modern English) and *knowen* (Middle English) to *know* (Modern English) (Freeborn 1998:449).

- The most prominent example of words that do not match the changes that have taken place with regards to pronunciation is the ‘ough’ words. A list of some of these words is provided below indicating from which period these words were derived. In Old English (OE) these words were written with either a (g) or an (h). Later the sound became (gh). Various dialects also underwent diverse changes, just like the vowels. Some ‘ough’ words include:

bought	OE boht	OE broht	sought	OE soht
cough	ME coghe		thorough	OE puruh
dough	OE dag/dah		tough	OE toh
fought	OE fugt		wrought	OE worth

(Freeborn 1998:449)

This sentence contains some words that demonstrate each ‘ough’ pronunciation: ‘A rough-coated dough-faced ploughboy strode coughing and hiccoughing thoughtfully through the streets of the borough’. (Freeborn 1998:450).

- A new feature in English that arose from the mid-16th century was the incorporation of the digraph (oa) in order to differentiate [ɔ:] from the long vowel [o:], written as (oo). These long vowels had shifted from their Middle English sounds. The long vowel [ɔ:] was in the course of being altered to [o:],

and [o:] was in the course of being altered to [u:]. This would provide clarity as to the variation found in the spelling and pronunciation of words like *goose* and *food*, as opposed to *foam* and *load* (Freeborn 1998:451).

Other examples of words where spellings differ from pronunciation include: blood [ʌ], good [ʊ], brooch [θʊ] and food [u:]. These changes came about as a result of a difference found in social as well as regional dialects. These changes have resulted confusing the spelling system as we know it today (Freeborn 1998:451).

Considering the long history and the intricacy of the English language it is clearly not an easy language to master. Grade 2 learners who have to master English as a second language thus have many language obstacles they need to overcome. The fact that English is an irregular language where letters and sounds do not always correspond becomes a challenge. This means that second language learners are susceptible to making errors when they are required to learn new words. Teachers should take care when presenting phonics to the young Grade 2 learner as he or she could easily become confused when words are encountered where the letters do not behave in the required manner.

3.4 CONCLUSION

In this chapter the emphasis was placed on the profile of the Grade 2 learners in order to establish the development that takes place and how all factors are interrelated. The profile investigated the aspects of the young learner that are beneficial to his or her development. The child's nutritional needs are important for overall development and functioning. The child's health and possible health issues the child may experience during this time of his or her life. The physical development discussed the child's gross motor and fine motor muscle control and development. Piaget's four stage cognitive development theory was discussed and the stage or stages that the Grade 2 child would themselves in. The concrete operational stage was discussed in detail. Erikson's eight stage personality developmental theory was discussed and the stage of psychosocial development the Grade 2 child would be in was discussed in detail.

A brief history of the English language was provided in order to deliver insight into the English language. An explanation of the possible difficulties second language learners will be faced with was also addressed. An overview of the English language explained the earliest form of writing and how writing eventually became a syllabic system that we use today. The overview of the English language also demonstrated how English became an irregular language as the links between the letters and sounds were affected by historical changes that changed the language with regards to speech and pronunciation that we use today.

The next chapter will discuss quantitative, qualitative and triangulation research methods. The ensuing chapter will also include the research hypothesis as well as all the methods that were used in order to conduct the research. The administration of the One-Minute reading test and the Schonelle Spelling B test as the research tools will also be discussed.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGIES

4.1 INTRODUCTION

The previous chapter explored the profile of the Grade 2 learner that provided an insight into the child's nutritional needs, health concerns the child may be faced with during this stages as well as the physical development that takes place. The child's cognitive development according to Piaget was considered. Erikson's eight stages of psychosocial development were discussed. The history of the English language provided an insight into the historical influences that changed the links between the sounds and letters thereby transforming English into an irregular language. The changes that took place have resulted in the way we write and pronounce words today.

This chapter will provide insight into quantitative research, qualitative research and triangulation method by which the research will be conducted. This chapter will also deliberate the research hypothesis and research methods that will be used to conduct the research. The administration of the One-Minute reading test and the Schonelle Spelling B Test that will be used as the research tools will also be included.

4.2 THE RESEARCH PROBLEM AND AIM

In chapter one (section 1.3.2) the broad research question was stated as:

Could the THRASS methodology as a phonics programme be used to improve the reading spelling abilities of Grade 2 English second language learners?

The specific research problem that was identified from the literature includes the following:

- Is there a significant relationship between the THRASS methodology as a phonics programme used and the improvement in the reading and spelling levels of Grade 2 English second language learners?

The aim of the research conducted is to enhance the understanding of reading and spelling difficulties as encountered by Grade 2 English second language learners and to determine whether the THRASS programme would be a suitable phonics programme that could ensure that these learners overcome the reading and spelling difficulties they encounter on a daily basis.

The focus of the investigation will be on the results obtained from the learners' Grade 1 year as compared with the results they obtained at the end of their Grade 2 year. It will then be determined whether the THRASS methodology could indeed improve the reading and spelling levels of Grade 2 English second language learners. The focus will also be on how they apply the knowledge they acquire when the THRASS methodology is used in order to determine whether reading and spelling is made easier for the learners. This will be observed in the way they approach reading and spelling words that are both familiar and unfamiliar to the learners. It can then be determined from the aim of the investigation that the following hypothesis can be tested.

4.3 RESEARCH HYPOTHESIS

The following research hypothesis can be formulated from the research question.

Hypothesis 1

Null-hypothesis

H₀₁: There is no significant relationship between the THRASS phonics programme used and the improvement in the reading and spelling levels of Grade 2 English second language learners.

4.4 RESEARCH DESIGN

In this study both quantitative and qualitative research will be conducted. Quantitative research is a research design that selects subjects; data collection techniques that include questionnaires, observations and interviews (McMillan & Schumacher 2001:165). The data will be collected by means of paper and pencil tests (McMillan & Schumacher 2001:40). The paper and pencil tests that will be used include the one-minute-reading test and the Schonelle Spelling B Test.

The study will also include qualitative research. Qualitative research presents the facts that have been obtained from the research in a narration of words (McMillan & Schumacher 2001:598). The qualitative design is an interactive investigation in which the researcher collects data through face-to-face situations whereby the researcher interacts with the selected persons in their environment (McMillan & Schumacher 2001:395).

The qualitative data will be collected by means of field observations that will be done by observing the learners in their natural setting, that is, the classroom while the programme is being implemented.

Triangulation will be used at the end of the research to verify the results from the quantitative research with the results from qualitative data. Triangulation has been described by Padgett (1998 as cited in De Vos, Strydom, Fouché & Delpont 2005: 361) as the convergence of various perspectives in order to supply a greater confidence that what is being researched has been done accurately. Therefore, the idea of triangulation is used to consciously combine quantitative and qualitative methodologies.

4.4.1 Sampling

The research sample will be taken from two Grade 2 classes in an English medium inner city school in Pretoria. Two groups of Grade 2 learners will participate in the study over a period of two years. The Grade 2 learners who participate in the study will range in age from 6 turning 7, to 8 turning 9. The age of the learner depends on the age the learner started school. Some learners were in need of repeating a grade and that will also affect their age. The two classes will be divided into a control group and an experimental group. A control group can be defined as the group that will receive no treatment in an experiment (McMillan & Schumacher 2001:587). An experimental group can be defined as the group that will receive the condition that the experimenter has hypothesised as the factor that will have an influence on the subjects' behaviour. (McMillan & Schumacher 2001:587).

In the first year of the research the control group will consist of 20 learners and the experimental group will consist of 16 learners. In the following year the control group

will consist of 16 learners and the experimental group will consist of 15 learners. A total of 67 Grade 2 learners would have participated in the study over a period of two years. The two classes are randomly divided at the end of their Grade 1 year where learners stand an equal chance of being placed in either class. The validation for this choice is due to the fact that many of the learners who are being educated at this school are receiving their education in a language that is different to their home language. The Grade 2 group was chosen due to the fact that Grade 1 learners are not able to read and write at the beginning of the year, thus making it impossible to obtain reading and spelling levels that could be compared later.

The abolishment of apartheid in 1994 encouraged learners of all races to receive their education wherever they desired. This meant that more and more learners were placed in schools where the language of instruction differed from their home language. It is for this reason that South African learners, especially those learners who are learning in a language that differs from their home language to follow a suitable language programme so that they are able to reach their optimum level of development. The learners who formed part of the study speak at least one of the official languages, other than English, as their home language. The learners who speak English as their home language will be excluded from the study as it may have a negative influence on the results.

4.4.2 Instruments and Administration

The quantitative research design will use paper and pencil tests that include the one-minute-reading test and the Schonelle Spelling B Test.

In the one-minute reading test the learner is given one minute to read as many words as he or she can. Any word(s) that have been incorrectly pronounced or omitted are underlined and not included in the final score. The total number of words read correctly during the one minute period is counted and a reading level is obtained from the scoring sheet. The one-minute reading test will be administered to the learners by the remedial teacher of the school at the end of the year.

In the Schonelle Spelling B Test the teacher reads the words from the list. The word should be enunciated distinctly and correctly. The teacher should not syllabify the

words. The descriptive sentence in which the word occurs is also read to the learners. The word that should be written down is repeated. There is no time limit and the sentence is read only once. The learners should be discouraged from repeatedly making changes or from writing excessively slowly, by speeding up the rate at which the words are read. Once the learner writes seven consecutive words incorrectly, the test is over. The number of words spelt correctly is counted and a spelling level is obtained from the scoring sheet. This test will be administered to the learners by their class teacher.

Both the reading and spelling tests will be administered at the end of the year. This means that the learners will receive the THRASS programme from the beginning of term 1 to the end of term 3. The last term will be used to collect all data.

The qualitative data will be collected by means of field observations that will be done by observing the learners in their natural setting, that is, the classroom while the programme is being implemented. This is done in the natural setting of the classroom where the learners can be observed in order to gain an understanding of the difficulties learners are faced with when they are required to read and write familiar and unfamiliar words.

4.4.3 Participant observations

The learners in the experimental group will be observed by the researcher during the phonics lessons they receive using the THRASS methodologies (see chapter 2.6). The researcher will take note of the terms the learners' use, their ability to apply their new knowledge to familiar and unfamiliar words as well as the learners' reasoning for choosing a particular spelling choice.

At the beginning of the year the learners seem unsure of the terms graph, digraph, trigraph, quadgraph and split digraphs that form part of the THRASS programme (see chapter 2.6.3.4.) The learners are not able to use the terms confidently. It will take the learners a few lessons before they are able to use the terms with ease and complete confidence. The learners will be encouraged to use the terms while providing examples of the sounds and words they are learning. The learners are able to use the terms and provide examples of sounds by the end of the first term.

The learners are encouraged to consult their teacher or researcher when they are unsure of how to spell a word. The learners are then aided by their teacher or the researcher to break the words into its various sounds. The learners are able to identify the first and last sounds of the words but experience difficulties with the vowel sounds. They are able to identify the short or long vowel sound most of the time but they are not always sure of the long vowel choice they should make when writing some words.

During the reading sessions the learners are encouraged to decipher unfamiliar words by breaking the words into their sound components. Most of the learners are able to sound the first and last sounds but some of the learners experience difficulties noticing the digraphs, trigraphs, quadgraphs and split digraphs. Some of the learners still sounded each letter which often led to the incorrect pronunciation of the word. Sometimes the way in which the word is sounded makes it impossible to hear what the word could be. As time goes by the learners find it easier to identify the digraphs, trigraphs, quadgraphs and split digraphs and apply their knowledge when reading familiar and unfamiliar words. Most of the learners find that their reading becomes more fluent as they progress through the programme.

4.4.4 Collection of Data

Permission will be obtained from the school and from the parents of the Grade 2 learners (see Appendixes A and B). The data will be collected over a period of two years with two different Grade 2 classes. The learners in the experimental group will receive the THRASS phonics programme for the first three terms of the year. The learners in the control group will receive an alternative phonics method for the first three terms of the year. The last term will be used to collect the scores of the Grade 2 English second language learners' reading and spelling levels. The testing will take place over a period of two weeks. The data will be collected over a period of two years.

4.5 ANALYSIS OF DATA

The data that will be gathered from the reading and spelling tests will be subjected to statistical analysis in order to determine whether the scores from the experimental

and control groups differ significantly. The data will be sent in and it will be processed by a qualified statistician in order to establish whether the results are valid and reliable.

4.6 VALIDITY AND RELIABILITY

Instruments or devices are used in qualitative measurement in order to acquire a statistical catalogue that relates to the features of the subjects. A concise report of the statistical values is then reported as the outcomes of the study. The results will therefore rely critically on the quality of the measurement. A measure that is weak or prejudiced will yield results of the same caliber. On the other hand, strong measures will improve the poise that the results are accurate. Validity and reliability are two important concepts of measurement gauges that will determine the quality of the results (McMillan & Schumacher 2001:239).

4.6.1 Validity

The following elucidation of what validity is in quantitative research was provided by Joppe (2000, as cited in Golafshani 2003:602). The validity of the research governs whether the research actually measures that which it proposed to measure or how honest the research results are. The researchers are generally able to regulate the validity by asking a succession of questions, and they will frequently look to the research conducted by others for the answers.

Three types of validity will be discussed:

- Face and content validity
- Concurrent and predictive validity
- Construct validity

(Kumar 2005:154)

4.6.1.1 Face and content validity

The term *face validity* refers to the test taker's opinion of what the test is measuring as opposed to what the test is really measuring. The test taker would determine how applicable the test items seem to be. A test that seems to measure what it suggests to measure then it could be said that the test has great face validity. Face validity is

determined by the test taker, and not by the test user. The test taker's confidence in the test or motivation to participate in the test may falter if he or she is required to participate in a test that exhibits poor face validity. The test taker may be of the opinion that the test will come to an invalid deduction (Cohen & Swerdlik 2010:174).

It may be that the test is valid and reliable even though it may lack face validity. If this is not apparent to the interested parties then the test will be received with undesirable consequences (Cohen & Swerdlik 2010:174-176).

The aim of *content validity* is to prove that the tool chosen has been implemented properly and expansively and that the tool has covered the areas that it intended to cover. The time available may reduce the respondents' motivation to complete a long questionnaire, for example, in its entirety which prevents addressing all issues. It is up to the researcher in these cases to guarantee that the essential issues are covered in order to ensure that there is an unbiased representation of the issues being investigated and that the components selected for the research samples have been addressed profoundly. Representativeness of items can be ensured through careful sampling (Cohen, Manion & Morrison 2007:137).

4.6.1.2 Concurrent and predictive validity

Concurrent validity is determined by the manner in which a tool matches with a second tool that has been conducted concurrently. Predictive validity is determined by the manner in which the tool is able to predict an outcome (Kumar 2005:154).

4.6.1.3 Construct validity

Construct validity is a more refined procedure used to establish the validity of a tool. Construct validity is built upon statistical procedures. It is determined when the impact of each hypothesis to the total variance is perceived in a phenomenon is established (Kumar 2005:154).

It is pertinent to mention that this study will adhere to the principles of construct validity as it is imperative that the cause and effect will honestly represent the world in reality as it should occur in similar situations. An experiment should be able to convert theory (constructs) into definite substances that are able to be measured.

There is no point in conducting research that will not measure the constructs that it is supposed to measure (Straker 2000-2012).

4.6.2 Reliability

Theoretically, reliability is concerned whether a particular procedure that is applied recurrently to the same entity, would generate identical outcomes every time. Reliability, therefore has to do with the total random error obtained from a measurement. The more the measure tests to be reliable, the less random error it has (Rubin & Babbie 2009:194).

4.7 CONCLUSION

The emphasis of this chapter was placed on the research design and methodology that gave an in-depth discussion as to how the research will be conducted. This chapter also investigated the research problem and research hypothesis that had been stated. Another aspect that was discussed in this chapter includes the statistical techniques that will be used in order to validate the hypothesis contained in this investigation.

The emphasis of the next chapter will be on the clarifications of the findings that will be yielded with regards to the investigation that was done in order to establish whether the methodology taught in the THRASS programme would improve the reading and spelling levels of English second language Grade 2 learners. A profound discussion on this topic will be carried out in order to determine whether the null hypothesis that was stated, will be accepted or rejected.

CHAPTER 5

RESULTS OBTAINED FROM THE INVESTIGATION

5.1 INTRODUCTION

The previous chapter dealt with the research design and methodologies where quantitative research, qualitative research and the triangulation method were discussed. The previous chapter also stated the research hypothesis and elaborated on the research methods that were used in order to conduct the research. The One-Minute reading test and the Schonelle Spelling Test B were used in order to obtain the research results and were therefore also described in detail.

The emphasis of this chapter will be placed on presenting the results from the investigation. The statistical analysis that relates to the validity of the tests will be deliberated upon. The calculations that were done in order to establish the norms for the reading and spelling tests conducted over last two years will be included. Finally, the results regarding the hypothesis will also be provided in this chapter.

5.2 RELIABILITY OF THE READING AND SPELLING TESTS

The term *reliability* is used in order to establish whether identical outcomes would be generated if a particular procedure is applied recurrently to the same entity. Therefore, reliability will be determined by the total random error that was obtained from a measurement. The test is said to be valid when the random error is low (Bubin & Babbie 2009:194).

The One-Minute reading test and the Schonelle Spelling Test B are both standardised tests that provide the administrator with clear guidelines as to how the tests are to be administered as well as how the tests are to be scored. The two groups of Grade 2 learners were given the same instructions, the same words, the same sentences and the teachers were provided with the same set of directions in order to administer the Schonelle Spelling Test B test. The One-Minute reading test was administered to the learners by the remedial teacher who paid careful attention to the guidelines in order to carry out the test objectively and correctly.

Measurement experts prepare most standardised tests commercially. Normally, this means that experts take careful consideration of the nature of the norms, reliability, and validity of the test. As a result, the testing instruments will be objective and will be moderately uninfluenced or biased by administer of the test (McMillan & Schumacher 2001:251). Therefore, it can be concluded that the standardized tests that were used in the study are a reliable means for collecting the reading and spelling levels for the Grade 2 English second language learners.

5.3 VALIDITY

Joppe (2000, as cited in Golafshani 2003:602) provides the following clarification of what validity in quantitative research is. The *validity* of the research determines whether the research actually measures that which it planned to measure or how authentic the research results really are. Researchers are in the optimal position in order to regulate the validity of the research whereby they ask a sequence of questions, and they will regularly look for the answers in the research that has been conducted by others. The validity of the One-Minute reading test and the Schonelle Spelling B test is based on content and construct validity.

5.3.1 Content validity

The following procedures were implemented in order to ensure that content validity takes place:

- The spelling test that was given to the learners at the end of their Grade 1 year was the same test they received at the end of their Grade 2 year. The Schonelle Spelling B test was chosen as it tests a variety of words from short vowel sounds to digraphs, trigraphs and quadgraphs the learners would have learnt in their Grade 1 and 2 years.
- The instructions provided were followed rigorously by the administrators of the spelling test. The remedial teacher worked meticulously to ensure that the One-Minute reading test was conducted as stated in the guidelines.
- The norms were accurately read in order to determine the reading and spelling levels obtained at the end of their Grade 1 and 2 years.

5.3.2 Construct validity

Statistical procedures are used in order to establish if a tool has construct validity. As mentioned in section 5.2 most standardised tests are prepared commercially by measurement experts. Under normal circumstances, the experts pay careful attention to the nature of the norms, reliability, and validity of the test. As a result, the testing instruments will be objective and will be moderately uninfluenced or biased by administer of the test (McMillan & Schumacher 2001:251). Therefore, it can be concluded that the standardized tests that were used in the study have been tested for construct validity and does not need to be addressed in this research.

5.4 SCORES OBTAINED FOR THE READING AND SPELLING TESTS

The reading and spelling scores collected over the two years will be represented in the following tables. Table 5.1 represents the scores for the control group (the group that followed *Teaching reading in the early grades*) obtained for the first year of the study. Table 5.2 represents the scores for the control group obtained for the second year of the study. Table 5.3 represents the scores for the experimental group (the group that followed the THRASS programme) obtained during the first year of the study. Table 5.4 represents the scores for the experimental group obtained during the second year of the study.

The first column is the number allocated to the learner. The second column indicates the learner's home language. The third column is the learner's gender. The fourth column indicates the learner's chronological age at the end of their Grade 1 year. The fifth column indicates the learner's chronological age at the end of their Grade 2 year. The sixth column represents the learner's reading age obtained at the end of their Grade 1 year. The seventh column represents the learner's reading age obtained at the of their Grade 2 year. The eighth column represents the learner's spelling age obtained at the end of their Grade 1 year. The ninth column represents the learner's spelling age obtained at the end of their Grade 2 year.

The learner's age is represented in years and months. The months-part of the learner's age appears after the semi colon. The full year appears before the semi colon in each measure.

Table 5.1: Reading and spelling scores obtained for the control group during the first year of the research (did not receive the THRASS programme)

			Grade 1	Grade 2	Grade 1	Grade 2	Grade 1	Grade 2
Learner's number	Home Language	Gender	Chronological Age (1)	Chronological Age (2)	Reading Age (1)	Reading Age (2)	Spelling Age (1)	Spelling Age (2)
1	Setswana	M	7:02	8:01	7:04	7:08	7:04	8:01
2	Venda	F	7:00	8:00	7:09	8:05	6:10	7:06
3	isiZulu	F	7:05	8:04	6:03	7:08	6:10	7:03
4	Sesotho	F	7:05	8:05	7:07	8:03	7:05	9:08
5	Sesotho	F	7:05	8:04	7:07	9:06	7:02	8:04
6	Setswana	M	7:05	8:04	6:05	7:07	6:09	6:09
7	Setswana	M	6:11	7:11	7:04	8:01	7:01	8:02
8	XiTsonga	F	7:02	8:02	8:00	9:10	7:00	7:09
9	Sesotho	M	7:06	8:05	7:06	8:06	6:10	7:09
10	Swazi	F	7:00	7:11	8:04	9:05	7:10	9:01
11	Sesotho	F	7:07	8:06	6:07	7:07	7:00	7:01
12	Sesotho	F	7:04	8:03	7:10	8:02	7:01	8:02
13	Setswana	M	7:03	8:03	6:06	7:08	6:11	7:07
14	Sesotho	M	7:05	8:04	7:09	8:11	7:04	8:04
15	Setswana	M	7:05	8:05	7:08	9:07	7:00	7:05
16	N Sotho	F	7:08	8:08	8:08	10:07	7:07	9:02
17	Sesotho	M	7:07	8:06	7:01	7:11	6:10	7:07
18	Sepedi	F	6:11	7:11	8:02	9:11	7:09	9:00
19	isiZulu	M	7:01	8:01	7:10	9:01	7:09	9:03
20	Setswana	M	7:08	8:08	7:07	8:07	6:09	8:04

Table 5.2: Reading and spelling scores obtained for the control group during the second year of the research (Continued)

			Grade 1	Grade 2	Grade 1	Grade 2	Grade 1	Grade 2
Learner's number	Home Language	Gender	Chronological Age (1)	Chronological Age (2)	Reading Age (1)	Reading Age (2)	Spelling Age (1)	Spelling Age (2)
21	isiZulu	M	6:09	7:08	7:00	8:04	6:07	7:07
22	Setswana	F	7:04	8:03	7:08	8:04	7:06	8:03
23	Sesotho	F	7:00	7:11	7:07	9:07	7:02	7:10
24	Ndebele	F	6:07	7:06	6:10	7:08	6:07	6:11
25	Setswana	M	7:01	8:00	6:07	7:08	6:10	7:02
26	Sesotho	F	7:01	8:00	<6	7:07	6:07	7:07
27	Sesotho	F	6:10	7:10	7:03	8:01	7:00	7:11
28	Sesotho	F	7:06	8:06	6:09	8:02	6:10	7:00
29	Setswana	F	7:04	8:03	7:03	8:01	7:02	7:01
30	Setswana	F	7:05	8:05	10:05	12:11	8:05	10:03
31	Setswana	F	7:05	8:04	7:08	8:09	7:00	8:00
32	Setswana	F	7:07	8:07	7:01	8:01	6:09	7:09
33	Sesotho	F	7:01	8:01	7:05	10:01	6:09	8:04
34	isiZulu	M	7:03	8:03	6:07	7:11	6:10	7:11
35	isiZulu	F	6:08	7:08	7:11	9:10	7:05	8:06
36	Setswana	M	7:04	8:04	6:00	7:01	6:07	6:09

Table 5.3: Reading and spelling scores obtained for the experimental group during the first year of the research (received the THRASS programme)

			Grade 1	Grade 2	Grade 1	Grade 2	Grade 1	Grade 2
Learner's number	Home Language	Gender	Chronological Age (1)	Chronological Age (2)	Reading Age (1)	Reading Age (2)	Spelling Age (1)	Spelling Age (2)
37	Setswana	F	6:11	7:11	7:01	7:05	7:01	7:05
38	Sesotho	F	7:06	8:05	7:03	9:11	7:03	8:04
39	Sesotho	M	7:01	8:00	7:04	8:02	6:07	7:03
40	Setswana	M	7:04	8:04	7:07	9:07	7:03	8:02
41	Tsonga	F	7:00	8:00	7:08	10:03	6:10	7:04
42	Sesotho	F	7:01	8:01	7:11	9:00	6:09	8:05
43	Setswana	F	6:10	7:10	7:09	9:02	7:08	8:02
44	XiTsonga	F	7:03	8:03	10:05	11:06	7:10	9:09
45	Setswana	F	7:02	8:02	8:05	12:10	8:02	9:09
46	Sesotho	M	7:11	8:11	6:03	7:02	6:09	7:00
47	isiZulu	F	6:11	7:10	9:02	10:07	7:04	8:05
48	Afrikaans	M	7:01	8:00	6:07	8:07	6:08	7:07
49	Setswana	F	7:02	8:02	6:03	8:02	6:10	7:07
50	Sesotho	M	7:02	8:02	8:06	9:08	7:00	8:04
51	Setswana	M	6:08	7:07	6:09	7:03	6:08	6:11
52	isiZulu	F	7:02	8:02	7:10	8:11	7:01	7:08

Table 5.4: Reading and spelling scores obtained for the experimental group during the first year of the research (continued)

			Grade 1	Grade 2	Grade 1	Grade 2	Grade 1	Grade 2
Learner's number	Home Language	Gender	Chronological Age (1)	Chronological Age (2)	Reading Age (1)	Reading Age (2)	Spelling Age (1)	Spelling Age (2)
53	Setswana	F	7:07	8:06	7:05	8:10	6:10	7:07
54	Setswana	F	7:05	8:04	6:07	9:04	7:02	8:06
55	Xhosa	F	7:00	8:00	8:09	11:06	7:04	8:08
56	Sesotho	F	6:09	7:00	7:08	9:05	7:02	9:08
57	Xhosa	F	7:04	8:03	6:03	7:09	6:05	7:04
58	Sesotho	F	6:11	7:11	6:08	7:04	6:10	7:05
59	Setswana	F	6:07	7:07	9:07	11:05	7:04	9:00
60	Setswana	F	7:04	8:04	6:04	8:05	6:06	7:11
61	Xhosa	M	6:08	7:08	7:00	9:04	6:08	8:01
62	Other	M	6:09	7:09	6:02	7:06	6:07	7:03
63	Setswana	F	6:11	7:11	6:03	8:00	6:02	6:10
64	isiZulu	F	7:02	8:02	9:00	9:08	7:08	10:08
65	Setswana	M	7:06	8:05	6:07	7:08	6:10	7:10
66	Xhosa	F	7:00	8:00	6:06	7:10	6:07	7:11
67	isiZulu	M	7:10	8:09	7:01	7:11	6:11	7:04

The information obtained from the data was taken and consolidated as frequency distribution of biographical properties as shown in table 5.5. The first language spoken by the learners over the two years has been calculated as a percentage. This is found in the first part of the table. The number of male and female learners who participated in the study over the two years had also been calculated and a percentage has been obtained. This is indicated under the heading 'gender'. The number of participants for the first and second year of the study has been calculated and a percentage has been obtained. This is indicated under heading 'year'. The number of participants who were part of the control group over the two years has been calculated. The number of participants who were part of the experimental

group over the years has been calculated. A percentage for the two groups has been obtained and the results have been indicated under the heading 'group'.

Table 5.5: Frequency distributions of biographical properties

Language	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Afrikaans	1	1.49	1	1.49
North Sotho	1	1.49	2	2.99
Ndebele	1	1.49	3	4.48
Other	1	1.49	4	5.97
Sepedi	1	1.49	5	7.46
Sesotho	19	28.36	24	35.82
Setswana	25	37.31	49	73.13
Swazi	1	1.49	50	74.63
XiTsonga	3	4.48	53	79.10
Venda	1	1.49	54	80.60
Xhosa	4	5.97	58	86.57
isiZulu	9	13.43	67	100.00
gender				
male	24	35.82	24	35.82
female	43	64.18	67	100.00
year				
First year of the research	36	53.73	36	53.73
Second year of the research	31	46.27	67	100.00
group				
Control	36	53.73	36	53.73
Experimental	31	46.27	67	100.00

From the results obtained from the data represented in table 5.5 it becomes evident that most of the learners who participated in the study spoke Setswana (37,31%) as their First language. This was followed by Sesotho speaking learners (28,36%), isiZulu 13,43%, Xhosa 5,97%, XiTsonga 4,48%.

There were considerably more females (64,18%) than males (35,82%) that participated in the study. This can be attributed to the fact that at this particular inner city school, males are accepted up until Grade 3.

During the first year of the study there were 36 participants which made up 53,73% of the population. During the second year of the study there were 31 participants which made up 46,27% of the population.

The control group consisted of 53,73% of the population over the two year period, while the experimental group consisted of 46,27% of the population over the two year period.

The results obtained from the reading and spelling tests that were collected over the two years will be used in order to test the hypothesis.

5.5 TESTING THE HYPOTHESIS

It is of fundamental importance that the hypothesis that was formulated and stated in section 4.3 be tested by means of statistical procedures.

5.5.1 Testing of the hypothesis

The following null hypothesis was stated in section 4.3. This hypothesis was tested:

H₀₁: There is no significant relationship between the THRASS phonics programme used and the improvement in the reading and spelling levels of Grade 2 English second language learners.

The 67 participants were used in order to test this null hypothesis. In the first year of the research (2010), the Control Group consisted of 20 learners and the Experimental Group consisted of 16 learners. A total of 36 learners participated in

the first year's study. In the second year of the research, the Control Group consisted of 16 learners and the Experimental Group consisted of 15 learners. A total of 31 learners participated in the 2011 study. A total of 67 learners participated in the overall study.

In order to calculate the difference between the pre- and post-measures, the month part of the age (the numbers that appear after the semi colon) had to be converted to a decimal format. This means that the number, represented in months, is divided by 12. For example, 6 months would be converted to $6/12 = 0.50$. This was then added to the full years, the number reported before the semi colon in each measure. This conversion is shown in table 5.6.

Table 5.6: The pre- and post-reading and spelling measures of respondents and the difference calculated between pre- and post-spelling and reading measures.

Learner's number	Difference between pre- and post reading measures	Pre-reading measure	Post-reading measure	Difference between pre- and post spelling measures	Pre-spelling measure	Post-spelling measure
1	0.33333	7.3333	7.6667	0.75000	7.33333	8.0833
2	0.66667	7.7500	8.4167	0.66667	6.83333	7.5000
3	1.41667	6.2500	7.6667	0.41667	6.83333	7.2500
4	0.66667	7.5833	8.2500	2.25000	7.41667	9.6667
5	1.91667	7.5833	9.5000	1.16667	7.16667	8.3333
6	1.16667	6.4167	7.5833	0.00000	6.75000	6.7500
7	0.75000	7.3333	8.0833	1.08333	7.08333	8.1667
8	1.83333	8.0000	9.8333	0.75000	7.00000	7.7500
9	1.00000	7.5000	8.5000	0.91667	6.83333	7.7500
10	1.08333	8.3333	9.4167	1.25000	7.83333	9.0833
11	1.00000	6.5833	7.5833	0.08333	7.00000	7.0833

12	0.33333	7.8333	8.1667	1.08333	7.08333	8.1667
13	1.16667	6.5000	7.6667	0.66667	6.91667	7.5833
14	1.16667	7.7500	8.9167	1.00000	7.33333	8.3333
15	1.91667	7.6667	9.5833	0.41667	7.00000	7.4167
16	1.91667	8.6667	10.5833	1.58333	7.58333	9.1667
17	0.83333	7.0833	7.9167	0.75000	6.83333	7.5833
18	1.75000	8.1667	9.9167	1.25000	7.75000	9.0000
19	1.25000	7.8333	9.0833	1.50000	7.75000	9.2500
20	1.00000	7.5833	8.5833	1.58333	6.75000	8.3333
21	1.33333	7.0000	8.3333	1.00000	6.58333	7.5833
22	0.66667	7.6667	8.3333	0.75000	7.50000	8.2500
23	2.00000	7.5833	9.5833	0.66667	7.16667	7.8333
24	0.83333	6.8333	7.6667	0.33333	6.58333	6.9167
25	1.08333	6.5833	7.6667	0.33333	6.83333	7.1667
26	1.66667	5.9167	7.5833	1.00000	6.58333	7.5833
27	0.83333	7.2500	8.0833	0.91667	7.00000	7.9167
28	1.41667	6.7500	8.1667	0.16667	6.83333	7.0000
29	0.83333	7.2500	8.0833	-0.08333	7.16667	7.0833
30	2.50000	10.4167	12.9167	1.83333	8.41667	10.2500
31	1.08333	7.6667	8.7500	1.00000	7.00000	8.0000
32	1.00000	7.0833	8.0833	1.00000	6.75000	7.7500
33	2.66667	7.4167	10.0833	1.58333	6.75000	8.3333
34	1.33333	6.5833	7.9167	1.08333	6.83333	7.9167
35	1.91667	7.9167	9.8333	1.08333	7.41667	8.5000
36	1.08333	6.0000	7.0833	0.16667	6.58333	6.7500
37	0.33333	7.0833	7.4167	0.33333	7.08333	7.4167
38	2.66667	7.2500	9.9167	1.08333	7.25000	8.3333
39	0.83333	7.3333	8.1667	0.66667	6.58333	7.2500
40	2.00000	7.5833	9.5833	0.91667	7.25000	8.1667
41	2.58333	7.6667	10.2500	0.50000	6.83333	7.3333
42	1.08333	7.9167	9.0000	1.66667	6.75000	8.4167
43	1.41667	7.7500	9.1667	0.50000	7.66667	8.1667

44	1.08333	10.4167	11.5000	1.91667	7.83333	9.7500
45	4.41667	8.4167	12.8333	1.58333	8.16667	9.7500
46	0.91667	6.2500	7.1667	0.25000	6.75000	7.0000
47	1.41667	9.1667	10.5833	1.08333	7.33333	8.4167
48	2.00000	6.5833	8.5833	0.91667	6.66667	7.5833
49	1.91667	6.2500	8.1667	0.75000	6.83333	7.5833
50	1.16667	8.5000	9.6667	1.33333	7.00000	8.3333
51	0.50000	6.7500	7.2500	0.25000	6.66667	6.9167
52	1.08333	7.8333	8.9167	0.58333	7.08333	7.6667
53	1.41667	7.4167	8.8333	0.75000	6.83333	7.5833
54	2.75000	6.5833	9.3333	1.33333	7.16667	8.5000
55	2.75000	8.7500	11.5000	1.33333	7.33333	8.6667
56	1.75000	7.6667	9.4167	2.50000	7.16667	9.6667
57	1.50000	6.2500	7.7500	0.91667	6.41667	7.3333
58	0.66667	6.6667	7.3333	0.58333	6.83333	7.4167
59	1.83333	9.5833	11.4167	1.66667	7.33333	9.0000
60	2.08333	6.3333	8.4167	1.41667	6.50000	7.9167
61	2.33333	7.0000	9.3333	1.41667	6.66667	8.0833
62	1.33333	6.1667	7.5000	0.66667	6.58333	7.2500
63	1.75000	6.2500	8.0000	0.66667	6.16667	6.8333
64	0.66667	9.0000	9.6667	3.00000	7.66667	10.6667
65	1.08333	6.5833	7.6667	1.00000	6.83333	7.8333
66	1.33333	6.5000	7.8333	1.33333	6.58333	7.9167
67	0.83333	7.0833	7.9167	0.41667	6.91667	7.3333

The analysis of variance was calculated using the General linear model approach (GLM) in order to analyze the variance of the two sets of differences variables. In the one-way analysis of variance (ANOVA) the respective difference variables were entered as the dependent variables. The biographical variables as well as the group (experimental and control) variables were entered as the explanatory or independent variables in the analysis.

Two analyses as illustrated in tables 5.6 and 5.7 have the explanatory variables that proved to be the most encouraging influential variables. This means, that all preliminary ANOVA runs have not been included in this output. Only the two most encouraging models have been included.

Table 5.7: Two-factor analysis of variance on the differences between pre- and post-intervention reading scores (diffrr)

Source	DF	Sum of Squares	Mean Square	F Value	Pr >F
Model	2	3.64433144	1.82216572	3.80	0.03*
group	1	1.87153400	1.87153400	3.90	0.05*
gender	1	1.77279744	1.77279744	3.70	0.06
Error	64	30.67511301	0.47929864		
Corrected Total	66	34.31944444			

R-square = -.12

ANOVA assumptions to be met:

- Levene’s test for homogeneity of variance: Prob (F (Group) = 2.86) = 0.11
- Levene’s test for homogeneity of variance: Prob (F (Group) = 2.41) = 0.12
- Normality of residual: normal probability plots display a straight liner

Significance legend:

- *: statistical significance on the 5% level
- **: statistical significance on the 1% level
- ***: statistical significance on the 0.1% level

Table 5.7 indicates that the effect of group (experimental and control) on the reading progress of learners can be established through the analysis of variance. Significance has been established on the 5% level of significance.

Table 5.8: Two-factor analysis of variance on the differences between pre- and post-intervention spelling scores (diffs)

Source	DF	Sum of Squares	Mean Square	F Value	Pr >F
Model	2	1.68256675	0.84128338	2.57	0.08
group	1	0.57861231	0.57861231	1.77	0.18
gender	1	1.10395444	1.10395444	3.38	0.07
Error	64	20.91486277	0.32679473		
Corrected Total	66	22.59742952			

R-square = 0.08

ANOVA assumptions to be met:

- Levene’s test for homogeneity of variance: Prob (F (Group) = 0.74) = 0.39
- Levene’s test for homogeneity of variance: Prob (F (Group) = 0.2.39) = 0.13
- Normality of residual: normal probability plots display a straight liner

Significance legend:

- *: statistical significance on the 5% level
- **: statistical significance on the 1% level
- ***: statistical significance on the 0.1% level

Table 5.8 indicates that the effect of group (experimental and control) on the spelling progress of learners cannot be established through the analysis of variance. Significance has not been established.

The above results indicate that the null hypothesis can be neither accepted nor rejected as the reading progress of learners has been established through the analysis of variance. Significance has been established on the 5% level of significance. This means that the THRASS programme that was used during the two years of the research assisted in improving the reading abilities of Grade 2 English second language learners.

The spelling progress of learners, however, cannot be established through the analysis of variance as significance has not been established. This means that neither the THRASS programme nor the Teaching reading in the early grades: A teacher’s handbook was effective in improving the spelling abilities of Grade 2 English second language learners.

5.6 QUALITATIVE RESEARCH

The qualitative component of the research consisted of participant observation. The learners in the experimental group were observed at the beginning of the year. Their progress was monitored informally by their class teacher and the researcher for the duration of the implementation of the THRASS programme.

At the beginning of the year the learners were not sure about the terms graph, digraph, trigraph, quadgraph and split digraphs that form part of the THRASS programme (see chapter 2.6.3.4.) These terms were totally unfamiliar to the learners. The learners were not able to use the terms confidently in the beginning. It took the learners a few lessons before they were able to use the terms with ease and complete confidence. During the lessons the learners were encouraged to use the terms while providing examples of the sounds and words they are learning. By the end of the first term the learners were able to use the terms and provide examples of the various sounds they had learnt as well as the sounds they were still learning.

The teacher and the researcher were available to assist the learners when they were unsure of how to spell a word. The learners were aided by their teacher or the researcher to break the words into its various sounds. It became apparent that the learners were able to identify the first and last sounds of the words but experienced difficulties with the vowel sounds located in the middle of the word. They were able to identify the short vowel sound most of the time, however, they were not always sure of the long vowel choice they should make in some words. The learners were therefore not able to improve their spelling abilities.

During the reading sessions the learners were encouraged to decipher unfamiliar words by breaking the words into their sound components. Most of the learners were able to sound the first and last sounds but some of the learners experienced difficulties noticing the digraphs, trigraphs, quadgraphs and split digraphs. Some of the learners still sounded each letter which often led to the incorrect pronunciation of the word. There were occasions when the learners sounded the word where it was impossible to hear what the word could be. As time went by the learners found it easier to identify the digraphs, trigraphs, quadgraphs and split digraphs and they were able apply their knowledge when reading familiar and unfamiliar words. Most of

the learners found that their reading became more fluent as they progressed through the programme. This meant the reading abilities of learners had improved.

During the implementation of the THRASS programme it was noticed by the researcher that the learners were having fun while learning phonics. The learners enjoyed using the phonics chart displayed on their desks. This gave the learners the reassurance that they could use the desk chart as a reference or a clue to the sounds he or she would be considering when making a spelling a choice or when the learner is required to read or write an unfamiliar word (an example of the desk charts can be found in Appendix C and D).

The learners enjoyed learning from the phoneme machine as they enjoyed seeing the lip movements as well as hearing the correct pronunciation of the various sounds. This helped the second language learners who have had or who have limited exposure to the English language and where they do not always have someone at home who is a position to help or correct them.

5.7 CONCLUSION

Reading and spelling scores for Grade 2 English second language learners were collected over a period of two years. The One-Minute reading test was used to collect the reading data. The Schonelle Spelling Test B was used to collect the spelling data. The results of the reading and spelling tests can be viewed in tables 5.1 to table 5.4. These tables indicate the number that was allocated to each learner, the learner's home language, the learner's chronological age at the end of his or her Grade 1 and 2 year, and the learner's reading and spelling scores that had been obtained at the end of his or her Grade 1 and 2 year. This information was taken and consolidated as frequency distributions of biographical properties. This information is illustrated in table 5.5.

A total of 67 Grade 2 English second language learners participated in the study. All 67 participants were used in order to test the null hypothesis. An explanation was provided as to how the groups were split between the control and experimental groups. The number of participants per group as well as per year was provided.

The difference between the pre- and post-measures were calculated, where the month part of the age (the numbers that appear after the semi colon) had to be converted to a decimal format. The number that was represented in months, was then divided by 12. For example, 6 months would be converted to $6/12 = 0.50$. This was then added to the full years, the number reported before the semi colon in each measure. This conversion is shown in table 5.6.

The General linear model approach (GLM) was used in order to calculate the analysis of variance. The GLM was used in order to analyze the variance of the two sets of differences variables. In the ANOVA the respective difference variables were entered as the dependent variables. Only the two most encouraging models have been included in the statistical data.

From the results obtained from the statistical procedures it became clear that the null hypothesis could be neither accepted nor rejected as the reading progress of learners had been established through the analysis of variance. Significance had been obtained on the 5% level of significance. The spelling progress of learners, however, could not be established through the analysis of variance as significance had not been established.

The qualitative component of the research revealed that the learners made considerable progress in using the terms graph, digraph, trigraph and quadgraph. By the end of the research the learners were able to use the terms while providing examples of the various sounds they had learnt as well as the sounds they were still learning. The learners succeeded in their reading ability as they had great fun during the implementation of the programme and they looked forward to the next lesson. The desk charts provided the learners with clues as the sounds they would need in order to read or write familiar and unfamiliar words. The phoneme machine gave the learners a good visual representation of how to move their mouths in order to produce the correct pronunciation of the sounds.

The next chapter will discuss the educational implications regarding the research that took place. The next chapter will also provide suggestions that could be followed for future research studies.

CHAPTER 6

EDUCATIONAL IMPLICATIONS YIELDED FROM THE RESEARCH AND RECOMMENDATIONS FOR FURTHER RESEARCH

6.1 INTRODUCTION

The main purpose for conducting this research was to determine whether the THRASS methodology as a whole-picture keyword phonics programme would possibly improve the reading spelling abilities of Grade 2 English second language learners at an inner city in Pretoria. As previously mentioned in chapter 1.3.1 South Africa was one of forty countries that participated in the Progress in International Reading Literacy Study (PIRLS) that took place between 2005 and 2006. Through the PIRLS assessment it was ascertained that South African learners were the lowest performing country when it came to reading abilities (Howie, Venter, Van Staden, Zimmerman, Long, Du Toit, Scherman & Archer 2008). The study comprised of a literature review, pen and pencil tests and included an empirical aspect.

The literature review was undertaken in order to discuss the various approaches used by specialists in order to teach phonics. Profound explanations of the following phonics approaches were included: the 'bottom-up' (section 2.4), the whole-language (section 2.5), combined or eclectic approach (section 2.5.2) and THRASS whole-picture phonics approach (section 2.6). The alternative method, Teaching reading in the early grades: A teacher's handbook, provided by the Department of Education (section 2.7) was also examined.

A profile of the Grade 2 learner was deliberated upon in order to provide a holistic view of the young learner. The following aspects were included:

- The physical development of the learner
- The cognitive development of the learner
- First language development
- Second language development
- The psychosocial development of the learner
- Physical aspects
- Nutrition

- Health

An overview of the English language (section 3.3) highlighted how words and language have advanced into the practices used today in order to teach reading and writing skills (Teele 2004:47). A brief history of the English language was provided dating back to A.D 450 right up to the English we speak today. It was established that English is an irregular language where the links between the sounds and the letters have been affected by the historical events that have taken place and this has resulted in long-term changes with regards to speech and pronunciation (Bald 2007:2-3). Through this information, it was ascertained that the English language is clearly not an easy language to master, especially for the young, English second language Grade 2 learner.

This study comprised of both quantitative and qualitative research designs (section 4.4). In a quantitative research design data is collected by means of subjects; data collection techniques that include questionnaires, observations and interviews (McMillan & Schumacher 2001:165). The data used in this research was collected by means of paper and pencil tests (McMillan & Schumacher 2001:40). The paper and pencil tests that were used included the one-minute-reading test and the Schonelle Spelling B Test. The one-minute reading test was used to obtain the learner's reading level at the end of his or her Grade 1 and 2 years. The Schonelle Spelling B test was used to obtain the learner's spelling level at the end of his or her Grade 1 and 2 years.

The study also included a qualitative research design. Qualitative research presents the facts that have been obtained from the research in a narration of words (McMillan & Schumacher 2001:598). The qualitative design is an interactive investigation in which the researcher collects data through face-to-face situations whereby the researcher interacts with the selected persons in their environment (McMillan & Schumacher 2001:395). The qualitative data was collected by means of field observations where the learners were observed in their natural setting, that is, the classroom while the programme was being implemented. The observation took place in order to establish whether the learners were able to use the knowledge they

had received from the THRASS phonics programme and apply it when they were confronted by an unfamiliar word they had to read or write.

The research results (section 4.5) that were obtained from the investigation were discussed. Reliability and validity of the reading and spelling tests used in order to conduct the research were examined. The scores that were obtained for the reading and spelling tests were used to test the null hypothesis. It was established that the null hypothesis could neither be completely accepted nor could it be completely rejected as the reading level of the experimental group had improved significantly.

6.2 CONTRIBUTIONS YIELDED FROM THE RESEARCH

This research has made the following contributions. Firstly, this research has provided an explanation in chapter 2.2 as to the reasons why phonics instruction is so important, especially to the young Grade 2 English second language learner. A profound explanation of the various phonics approaches and methods were provided in order to assist all teachers gain a better understanding of the approaches and methods and to provide an understanding that these approaches and methods can be used in isolation or they can be used in combination with each other. An in-depth discussion of the THRASS whole-picture keyword phonics programme was given step by step. Also the programme proposed by the Department of Education about teaching reading in early grades was elaborated upon.

Secondly, this research provided a profile of Grade 2 learners. In this profile a holistic view of the learner is investigated in order to gain a better understanding of what is required in order for the learner to reach his or her optimal level of development. If any aspect of the learner is neglected or goes undeveloped, it could be detrimental to the overall functioning of the learner and may have a negative impact upon his or her academic achievements.

Thirdly, this research investigated the English language as can be seen in chapter 3.3. The English language has been directly influenced by the various historical periods that have affected the spelling of words, vowel sounds and patterns, as well as the pronunciation of words (Teele 2004:48). It was also established that English is an irregular language where the links between the sounds and the letters have been

affected by the historical events that have taken place (Bald 2007:2-3). The English language is clearly not an easy language to master, especially for a young Grade 2 English second language learner. This means that English second language teachers who are required to teach English may encounter the same language difficulties as the learners. As a result of this, incorrect teaching with regards to pronunciation and spelling could take place.

Fourthly, the statistical results obtained indicate that the THRASS whole-picture keyword phonics programme assisted the Grade 2 English second language learner with regard to his or her reading level but not with regard to his or her spelling abilities.

It is evident from the research results obtained from this study that there are a number of educational implications and recommendations that can be made. The contributions this research has made, as well as the limitations that were encountered while conducting this research study will be deliberated upon. Further research suggestions will also be provided.

6.3 EDUCATIONAL IMPLICATIONS AND RECOMMENDATIONS

In chapter 1.7.13 the following definition for reading is provided. 'Reading is about understanding written texts. It is a complex activity that involves both perception and thought. Reading consists of two related processes: word recognition and comprehension' (Pang, Muaka, Bernhardt & Kamil 2003:6).

The purpose of implementing the THRASS programme to a different Grade 2 class over two years was to determine whether the THRASS whole-picture phonics approach would possibly improve the reading and spelling abilities of Grade 2 English second language learners. The results were obtained over a two year period. The results were then subjected to statistical procedures in order to test the hypothesis that had been formulated. A reading and spelling age of the learners was obtained at the end of their Grade 1 year, and again at the end of their Grade 2 year. The data was processed by a registered statistician in order to verify the data collected. Through the processed data it became evident that teachers and parents

can make the reading and spelling process as effective as possible through collaboration with each other.

From the results obtained from the research conducted it becomes evident that both teachers and parents are in a position to assist the young Grade 2 English second language learner. The aim is to assist these learners in order to reach their optimum level of development when it comes to their reading and spelling abilities.

6.3.1 The teacher in the classroom

As stated in chapter 2.2 it is of cardinal importance that the Grade 2 teacher is made aware of the importance of phonics instructions as they are in a position to teach the learners about the links between the letters of written language (graphemes) and the individual sounds that occur in the spoken language (phonemes) (Armbruster, Lehr & Osborn 2001:12). Further in chapter 2.2 it is pointed out, that teachers are to teach phonics in order to provide Grade 2 learners with the tools they need in order to decode familiar and unfamiliar words with ease. Phonics is a foundational block when teaching learners to read and write. Once the learners are in a position to use phonics (to decode words) and vocabulary (gain an understanding of what the words mean) they will be able to understand what they are reading and writing (Department of Education 2007:13).

Teachers teaching in the Foundational Phase should be aware of the various phonics methods or phonics approaches that can be used when teaching their young learners to read and write. Teachers should be conscious that each approach has shown success to some degree. There are some reading programmes that suggest a combination of phonics and whole language be taught, but not concurrently (Stephanie. 2009-2012a). A teacher who knows his or her learners' requirements will be in a well-informed position as to which phonics programme(s) will be best suited for his or her learners.

From the qualitative research (see chapter 5.6) it becomes apparent that learners have to be taught and trained to the use terms such as graph, digraph, trigraph and quadgraphs. It is therefore recommended that teachers:

- 1) teaching in the Foundation Phase should be required to attend THRASS whole-picture keyword phonics programme training course that takes place over two days provided by the developers of the THRASS programme in order to adequately assist the learners. The teacher will then become accredited and certified in order to use the phonics programme with his or her learners in the classroom. This will ensure that the teacher is in a position to use the THRASS programme step by step as it is set out in the programme. Teachers will also be in a position to use the various terms described in the THRASS programme. First and second language teachers can download the phoneme machine from the THRASS website where the correct pronunciation of the phonemic sounds can be correctly reproduced to the learners.

- 2) obtain the *Teaching reading in early grades: A teacher's handbook* from the Department of Education to compare the programmes and to possibly use them in conjunction with each other. The teacher will be able to follow the guidelines as set out by the Department of Education especially if one considers the guideline of the new CAPS document.

The teacher is to be made aware of the various aspects that will influence the learner's learning and development as deliberated upon in chapter 3.2. The teacher is in a position to notice any aspects of the learner that still need to be developed in order for him or her to reach his or her full learning potential.

It is essential that the institutions where teacher instruction programmes are presented address the importance of content when teaching literacy skills to second language learners. Most teachers teaching in South Africa will come into contact with the intricate multilingual nature our learners encounter. Therefore, it is imperative that teachers have a profound theoretical and practical knowledge concerning the literacy and language skills necessary for second language learners to succeed in a first language environment.

First and second English second language teachers are to familiarise themselves with the historical periods that have directly influenced the spelling of words, the vowel sound patterns, as well as the way words are pronounced today. Teachers are

to be made aware that English is an irregular language as the links between the sounds and letters have been affected by the historical events that have taken place over the centuries. The English language is clearly not an easy language for the young Grade 2 English second language learner to master and will most certainly require expert knowledge from his or her teacher pertaining to the difficulties that may be encountered.

Teachers are also in the perfect position to identify reading and writing difficulties as soon as they occur. Teachers can then assist these learners to overcome any difficulties they experience. Through attending specialised remedial reading programmes or by applying the THRASS programme in the classroom, the teacher is able to obtain the skills necessary to assist his or her learners. Teachers and parents are to collaborate in order to assist the learner appropriately.

6.3.2 The parent at home

Parents are in a powerful position to assist their child and the school where necessary. It is a parent's responsibility to attend Parent Evenings, make appointments to see the teacher or to communicate in writing or telephonically in order to monitor his or her child's progress. Any concerns expressed by the teacher to the parents should be taken seriously and the necessary assistance should be given.

The parents at the school where the research was conducted are generally interested in their child's progress at school. These parents correspond on a regular basis with their child's teacher to monitor his or her progress. These parents also ensure that their child is assessed by the appropriate therapists, such as, the speech therapist and occupational therapist to ensure that their child reaches his or her optimal potential. There are, however, children who come from difficult home circumstances where the child's progress at school is not of cardinal importance. Some of the children come from single parent homes where the parent gives his or her attention to work issues. These parents often do not have the financial means in order to pay for additional therapies that are not offered by the school. It is also challenging for parents to drive their child to other places in order for their child to receive the necessary therapies. There are also some children who are being

brought up by their grandparents. The child's grandparents do not always understand the importance of having their grandchild assessed by the necessary therapists and they are not aware of the benefits that regular therapy will yield. Financial constraints also prevent the child from receiving the necessary therapies. Transportation to and from the therapies also presents challenges for the grandparents.

Learners who come from a home where their parents are educationally advantaged seem to be in a better position to succeed than his or her peers who are less resourced. It is also beneficial for the learner to participate in educationally motivating activities before he or she enters school as this will improve his or her academic performance when it comes to reading literacy. Parents who exhibit a high regard for their own reading pleasures also seem to have an encouraging influence on his or her child's academic performance.

The THRASS training course is also available to parents through their child's school. The school will be in a position to inform parents of the THRASS training courses taking place in their area as well as provide the parents with dates and times. It is invaluable that parents assist their child where possible with the attainment of the desired reading and spelling levels. Parents are able to do this by being informed about the importance of phonics and how THRASS builds on and enhances their child's knowledge of phonics.

6.4 MOTIVATIONAL ASPECTS

The THRASS programme has a number of motivational aspects that ensure that the learners enjoy learning phonics. It is imperative that the learners have fun while learning. The first motivational aspect pertains to the songs the learners can learn. The learners sing and perform various actions while singing in order to reinforce their memory of the various sounds and letters.

The second motivational aspect can be found in the phonics desk chart the learners have displayed on their desks. This gives the learner the reassurance that there is always a reference or a clue to the sounds he or she is considering when making a spelling a choice or when the learner is required to read an unfamiliar word.

The phoneme machine (section 2.6.3.11) also keeps the learners interested in learning phonics and they enjoy seeing the lip movements as well as hearing the correct pronunciation of the various sounds. This helps second language learners who have had or have limited exposure to the English language and where they do not have someone at home who is in a position to help them correctly.

6.5 LIMITATIONS REGARDING THE RESEARCH AND SUGGESTIONS FOR FURTHER RESEARCH

The aim of this research was to determine whether the THRASS whole-picture keyword phonics programme would improve the reading and spelling levels of Grade 2 English second language learners. Although the research yielded positive results for the reading abilities of these learners, there are areas that will require further attention.

This research was limited firstly, by the sample size. This research concentrated on a single school in the inner city of Pretoria. This small group cannot in any way represent the total diverse population of Grade 2 English second language learners in a South African context. However, the results obtained from this research provide a course for future research. The test's reliability and validity can be enhanced by including more Grade 2 English second language learners across the country that have the opportunity to receive THRASS programme.

This research was secondly limited by the fact that the Grade 2 learners did not have the opportunity to receive the programme in its entirety. This was due to the fact that there was a not sufficient amount of time to start the learners from the beginning of the programme. The Grade 2s are required to learn many different long vowel sounds in short amount of time. It would be advantageous to monitor a group of English second language learners who had been exposed to the THRASS programme from their Grade R year.

6.6 CLOSING REMARKS

The time that was spent conducting the research over past two years has been most enjoyable for both the researcher as well as the learners. The learners looked

forward to the phonics lessons and participated with enthusiasm. The researcher learnt a lot about the various phonics programmes and how these programmes can be used in conjunction with one another. The researcher also learned about the overall functioning of the Grade 2 learner and what aspects need to be addressed in order of the learners to reach their full learning potential.

South African learners are required to prosper in a country that is rich in diversity and multilingualism. It is the responsibility of both teachers and parents to utilise the useful information that was obtained from this research in order to ensure that the young Grade 2 English second language learner overcomes the difficulties he or she may encounter while learning in a second language.

BIBLIOGRAPHY

Adams, MJ & Bruck, M. 1995. Learning to read: resolving the great debate. In Teele, S. 2004. *Overcoming Barricades to reading: A Multiple Intelligences Approach*. California: Corwin Press.

Armbruster, BB, Lehr, F & Osborn, J. 2001. *Put reading first: The research building blocks for teaching children to read. Kindergarten through Grade 3*. Washington: National Institute for Literacy.

Arky, B. 2012. *Occupational Therapists: What Do They Do? When kids show delays in developing skills, OTs are often the first called in*.
<http://www.childmind.org/en/posts/articles/2012-8-14-occupational-therapy>
(Accessed 16 February 2013).

Asmal, K. 1999. *Statement in the National Assembly by the Minister of Education, Professor Kader Asmal, MP, on the occasion of International Literacy Day, 8 September 1999*. <http://www.info.gov.za/speeches/1999/9909091011a1006.htm>
(Accessed 27 March 2011).

Bald, J. 2007. *Using Phonics to Teach Reading and Spelling*. London: Paul Chapman Publishing.

Ball,EW & Blachman, BA. 1991. Does phoneme awareness training in kindergarten make a difference in early word recognition and developmental spelling? In Giambo, DA & Mckinney JD. 2004. The effects of a phonological awareness intervention on the oral English Proficiency of Spanish-speaking kindergarten children. *TESOL Quarterly* 38(1), 95-117.

Bear, DR, Invernizzi, M, Templeton, S & Johnston, F. 2000. Words their way. In Teele, S. 2004. *Overcoming Barricades to reading: A Multiple Intelligences Approach*. California: Corwin Press.

Behrman, JR, Alderman, H & Hoddinott, J. 2004. *Hunger and Malnutrition. Copenhagen Consensus – Challenges and Opportunities*.
http://greencardeb5expert.com/PDF/Hunger_and_Malnutrition.pdf (Accessed 25 March 2012).

Berry, L, Hall, K & Hendricks, M. 2010. *Nutrition – Vitamin A deficiency in children*.
http://www.childrencount.ci.org.za/uploads/factsheet_38.pdf (Accessed 16 February 2013).

Boeree, CG. 2006. Personality Theories: Jean Piaget.
<http://webpace.ship.edu/cgboer/piaget.html> (Accessed June 26 2012).

Boyle, MA & Long, S. 2007. *Personal Nutrition*. 6th Edition. Belmont: Thomson Learning, Inc.

Bradley, L & Field-Barnsley, R. 1993. Evaluation of a program to teach phonemic awareness to young children: A one year follow-up. In Giambo, DA & Mckinney JD. 2004. The effects of a phonological awareness intervention on the Oral English Proficiency of Spanish-speaking kindergarten children. *TESOL Quarterly* 38(1), 95-117.

Brandt, CJ. 2011. *Vitamins and minerals – what do they do?*
http://www.netdoctor.co.uk/health_advice/facts/vitamins_which.htm (Accessed 26 March 2012).

Brotherson, S. 2006. *Understanding Physical Development in Young Children*.
<http://www.ag.ndsu.edu/pubs/yf/famsci/fs632.pdf> (Accessed 27 March 2012).

Byrne, B. 2005. Theories of learning to read. In Atwill, K, Blanchard, J, Gorin, JS & Burstein, K. 2007. Receptive vocabulary and cross-language transfer of phonemic awareness in kindergarten children. *The Journal of Educational Research*, 100(6), 336.

Candy 4WAY Phonics Publications. 2008. *Basic Phonics Terms*.
http://www.candy4wayphonics.com/phonics_definitions.htm (Accessed 7 November 2012).

Cherry, K. 2012. *Erikson's Theory of Psychosocial Development: Psychosocial Development in Infancy and Early Childhood*.
<http://www.psychology.about.com/od/psychosocialtheories/a/psychosocial.htm> (Accessed 28 March 2012).

Chew, J. 2005. Synthetic Phonics.
http://www.syntheticphonics.com/synthetic_phonics.htm (Accessed 24 October 2011).

Chondrogiani, V. (2008). Comparing child and adult L2 acquisition of the Greek DP: Effects of age and construction. In Paradis, J. 2011. Individual differences in child English second language acquisition: Comparing child-internal and child-external factors. *Linguistic Approaches to Bilingualism* 1:3, 213-237. University of Alberta: John Benjamins Publishing Company.

Cleeremans, A, Destrebecqz, A & Boyer, M. 1998. Implicit learning: News from the front. In Ritchie, W.C., & Bhatia T.K. 2009. Second Edition. *The New Handbook of Second Language Acquisition*. 2nd Edition. Bingley: Emerald Group Pub Limited.

Cohen, L., Manion, L., & Morrison, K. 2007. Sixth Edition. Research methods in education. Oxon: Routledge.

Cohen, R.J., Swerdlik, M.E. 2010. Seventh Edition. *Psychological testing and assessment: An introduction to test and measurements*. Boston: McGraw-Hill Higher Education.

Coles, G. 2000. Misreading reading. The bad science that hurts children. In Tomlinson, B. 2007. *Language Acquisition and Development: Studies of Learners of First and Other Languages*. London; New York, NY: Continuum, c2007.

Collier, V. (1987). Age and rate of acquisition of second language for academic purposes. *TESOL Quarterly*, 21, 617–641. In Paradis, J. 2011. Individual differences in child English second language acquisition: Comparing child-internal and child-external factors. *Linguistic Approaches to Bilingualism* 1:3, 213-237. University of Alberta: John Benjamins Publishing Company.

Coltart, D. (2 September 2009). *THRASS Synthetic Phonics Programme: Helping to Realise Dreams in Zimbabwe*, media release. <http://davidcoltart.com/?p=822> (Accessed 16 December 2011).

Combaing Malnutrition in South Africa. 2008. Input paper for Health Roadmap. http://www.dbsa.org/Research/Documents/South%20Africa%20Nutrition_%20input%20paper_roadmap.pdf?AspxAutoDetectCookieSupport=1 (Accessed 25 March 2012).

Croft, C. 2008. *Middle childhood: Physical growth and development*. Chicago: Magna Systems.

Cross, C. 2011. Importance of Vitamin A. <http://www.livestrong.com/article/409760-importance-of-vitamin-a/> (Accessed 16 February 2011).

Cunningham, AE. 1990. Explicit versus implicit instruction in phonemic awareness. In Giambo, DA & Mckinney JD. 2004. The effects of a phonological awareness intervention on the Oral English Proficiency of Spanish-speaking kindergarten children. *TESOL Quarterly* 38(1), 95-117.

Davies, A & Ritchie, D. 2003. *Teaching handwriting, reading and spelling skills*. London: THRASS (UK).

Denham, K. & Lobeck, A. 2013. Second Edition. *Linguistics for Everyone: An Introduction*. Boston: Wadsworth, Cengage Learning.

Department of Basic Education. 2010. *Curriculum and Assessment Policy Statement (CAPS) Foundation Phase First Additional Language Grades R-3 Final Draft*. Pretoria: Department of Education.

Department of Education. 2001. *Education White Paper 6 - Special Needs Education: Building an inclusive education and training system*. Pretoria: Department of Education.

Department of Education. 2003. *Revised National Curriculum Statement Grades R-9. Teacher's guide for the development of learning programmes*. Pretoria: Department of Education.

Department of Education. 2007. *Teaching Reading in the Early Grades: A Teacher's Handbook*. Pretoria: Department of Education.

Department of Education. 2008 a. *Foundations for learning: Assessment framework foundation phase*. Pretoria: Department of Education.

Department of Education. 2008 b. *Government Gazette. Foundations for learning campaign*. No 306 (14 March 2008). No 30880.

Dhansay, M.A., & Marais, C.D., & Labadarios, D. Zinc status. National food consumption survey: fortification baseline (NFCS-FB-I) South Africa, 2005. *South African Journal Clinical Nutrition* 2008;21(3) (Suppl 2):245-300.

Diens, Z., & Perner, J. 1999. A theory of implicit and explicit knowledge. In Ritchie, W.C., & Bhatia T.K. (Eds) 2009. *The New Handbook of Second Language Acquisition*. 2nd Edition. Bingley: Emerald Group Pub Limited.

Dörnyei, Z., & Skehan, P. (2003). Individual differences in second language learning. In Paradis, J. 2011. Individual differences in child English second language acquisition: Comparing child-internal and child-external factors. *Linguistic Approaches to Bilingualism* 1:3, 213-237. University of Alberta: John Benjamins Publishing Company.

Du Plessis, S & Naudé, E. 2003. Needs of teachers in preschool centres with regard to multilingual learners. *South African Journal of Education*, 23(2), 122-129.

Education.com.2006- 2011. *Phonics through spelling*
<http://www.education.com/definition/phonics-through-spelling/> (Accessed on 27 July 2011).

Erikson, E.H. 1959. Identity and Life Cycle. In Green, R.R., & Kropf, N.2009. *Human Behavior Theory: A Diversity Framework*. Second revised edition. New Brunswick and London: Aldine Transaction.

Erikson, E.H. 1982. The Life Cycle Completed. In Green, R.R., & Kropf, N.2009. *Human Behavior Theory: A Diversity Framework*. Second revised edition. New Brunswick and London: Aldine Transaction.

Fox, B, & Routh, DK. 1984. Phonemic analysis and synthesis as word attack skills: Revisited. In Giambo, DA & Mckinney JD. 2004. The effects of a phonological awareness intervention on the Oral English Proficiency of Spanish-speaking kindergarten children. *TESOL Quarterly* 38(1), 95-117.

Freeborn, D. 1998. *From Old English to Standard English: A Course Book in Language Variation*. 2nd edition Ottawa: University of Ottawa press.

Gillon, G. 2005. Phonological awareness: From research to practice. In Attwill, K, Blanchard, J, Gorin, JS & Burstein, K. 2007. Receptive vocabulary and cross-language transfer of phonemic awareness in kindergarten children. *The Journal of Educational Research*, 100(6), 336.

Golberg, H, Paradis, J & Crago, M. (2008). Lexical acquisition over time in minority L1 children learning English as a L2. *Applied Psycholinguistics*, 29, 1–25. In Paradis, J. 2011. Individual differences in child English second language acquisition: Comparing child-internal and child-external factors. *Linguistic Approaches to Bilingualism* 1:3, 213-237. University of Alberta: John Benjamins Publishing Company.

Gordon, P & Lawton, D. 2003. *Dictionary of British Education*. London: Woburn Press.

Government Communications (GCIS). 2010/11. Eighth edition. *Pocket Guide South Africa*. Pretoria: Government Communications (GCIS).

Grantham-McGregor, S, Walker, C, Chang, S & Powell, C. 1997. Effects of Early Childhood Supplementation with and without Stimulation on Later Development in Stunted Jamaican Children. In Behrman, JR., Alderman, H & Hoddinott, J. 2004. *Hunger and Malnutrition. Copenhagen Consensus – Challenges and Opportunities* [http://greencardeb5expert.com/PDF/Hunger and Malnutrition.pdf](http://greencardeb5expert.com/PDF/Hunger_and_Malnutrition.pdf) (Accessed 25 March 2012).

Grantham-McGregor, S, Fernald, L & Sethuraman, K. 1999. Effects of Health and Nutrition on Cognitive and Behavioural Development in Children in the First Three Years of Life. In Behrman, JR., Alderman, H & Hoddinott, J. 2004. *Hunger and Malnutrition. Copenhagen Consensus – Challenges and Opportunities*. [http://greencardeb5expert.com/PDF/Hunger and Malnutrition.pdf](http://greencardeb5expert.com/PDF/Hunger_and_Malnutrition.pdf) (Accessed 25 March 2012).

Griffiths, C (28 May 2008a). *Helping to Change the Lives of Children in Zimbabwe – the THRASS Synthetic Phonics Programme*, media release. <http://www.prweb.com/releases/2008/05/prweb974894.htm> (Accessed 8 December 2011).

Griffiths, C. (24 April 2008b). *Government of Barbados Considering Implementing THRASS Phonics Programme for Children Across Barbados*, media release. <http://www.prweb.com/releases/2008/04/prweb887054.htm> (Accessed 8 July 2013).

Griffiths, C. (7 September 2008c). *Another Rounding Success for the THRASS Synthetic Phonics Programme*, media release. <http://www.prweb.com/releases/2008/09/prweb1296324.htm> (Accessed 8 December 2011).

Griffiths, C. (28 May 2009). *THRASS British Phonics Pilot in Nigeria Becomes Victim of its Own Success*, media release. <http://smart-grid.tmcnet.com/news/2009/05/28/4199558.htm> (Accessed 16 December 2011).

Gurian, M. 2011. *Boys & Girls learn differently: A guide for teachers and parents*. San Francisco: Jossey-Bass.

Heuberger, B. 2011. Define Analytic Phonics.
http://www.ehow.com/info_8745921_define-analytic-phonics.html (Accessed 2 November 2011).

HighReach Learning Inc. 2007. *Language development*.
http://www.highreach.com/highreach_cms/LinkClick.aspx?fileticket=XHpReossLY4%3D&tabid=106 (Accessed 17 July 2012).

Howie, S, Venter, E, van Staden, S, Zimmerman, L, Long, C, du Toit, C, Scherman, V & Archer, E. 2008. *PIRLS 2006 Summary Report: South African Children's Reading Literacy Achievement*. University of Pretoria: Centre for Evaluation and Assessment.

Jongejan, W, Verhoeven, L & Siegel, LS. 2007. Predictors of reading and spelling abilities in first- and second-language learners. *Journal of Educational Psychology*, 99(4), 835-85.

Joppe, M. 2000. The Research Process. In Golafshani, N. 2003. *Understanding reliability and validity in qualitative research*. The Qualitative Report, 8(4), 597-606.
<http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf> (Accessed 25 April 2012).

Kumar, R. 2005. *Research Methodology: A step-by-step guide for beginners*. 2nd Edition. London: SAGE publications Ltd.

Labadarios, D & Louw, R. Iron Status. In Labadarios, D. National food consumption survey: fortification baseline (NFCS-FB-I) South Africa, 2005. *South African Journal Clinical Nutrition* 2008;21(3) (suppl 2):245-300.

Lambert, MEG, Sharwood, KA & Lambert, EV. 2006. Obesity and overweight in South African primary school children – the Health of the Nation Study. *South African Medical Journal* 96:439-444.

Landsberg, E, Krüger, D & Nel, N. (eds.) 2005. *Addressing barriers to learning*. Pretoria: Van Schaik.

Learning Theories. 2007-2012. *Erikson's Stages of Development*.
<http://www.learning-theories.com/eriksons-stages-of-development.html> (Accessed 28 March 2012a).

Learning Theories. 2007-2012. *Stage Theory of Cognitive Development Piaget*.
<http://www.learning-theories.com/piagets-stage-theory-of-cognitive-development.html> (Accessed 28 March 2012b).

Liberman, S. & Bruning, N. 2007. Fourth edition. *The Real Vitamin & Mineral Book: The definitive guide to designing your personal supplement program*. New York: Penguin Group (USA) Inc.

Liberman, I & Shankweiler, D. 1985. Phonology and the problems of learning to read and write. In Atwill, K, Blanchard, J, Gorin, JS & Burstein, K. 2007. Receptive vocabulary and cross-language transfer of phonemic awareness in kindergarten children. *The Journal of Educational Research*, 100(6), 336.

Mail & Guardian 2000. Asmal: SA has thousands of unqualified or under-qualified teachers. In Buchorn-Stoll, B. 2002. The influence of storybook reading on language development. *Language matters*, 70(33), 25-48.

Mercola, J. 2010. *This Could Be Even BIGGER than the Vitamin D Discovery...* <http://articles.mercola.com/sites/articles/archive/2010/08/26/this-could-be-even-bigger-than-the-vitamin-d-discovery.aspx> (Accessed 16 February 2013).

Merriam-Webster. 2008. *Words from French*. http://www.myspellit.com/lang_french.html (Accessed 24 October 2011).

Merriam-Webster. 2013a. *Spelling*. <http://www.merriam-webster.com/dictionary/spelling> (Accessed 15 February 2013).

Merriam-Webster. 2013b. *Phonics*. <http://www.merriam-webster.com/dictionary/phonics> (Accessed 15 February 2013).

Merriam-Webster. 2013c. *Whole language*. <http://www.merriam-webster.com/dictionary/whole%20language> (Accessed 15 February 2013).

McMillan, JH & Schumacher, S. 2001. *Research in Education: A Conceptual Introduction*, 5th edition. New York: Longman.

Moreland, C. 2011. *List of Onset-Rime Phonics*. http://www.ehow.com/info_7891300_list-onsetrime-phonics.html (Accessed 27 July 2011).

Morin, A. 2013. *What is Whole Language Reading?* <http://childparenting.about.com/od/schoollearning/a/What-Is-Whole-Language-Reading.htm> (Accessed 15 February 2013).

National Reading Panel. 2011. *Phonics Instruction*. <http://www.readingrockets.org/article/254/> (Accessed 23 October 2011).

Newkirk, E. 2009. *Piaget's Cognitive Development Theory*. <http://www.slideshare.net/newkirker/Piagets-Cognitive-Development-Theory> (Accessed 28 March 2012).

Newman, B.M, & Newman, P.R. 2005. *Development through Life: A Psychosocial Approach* (8th ed). In Green, R.R., & Kropf, N.2009. *Human Behavior Theory: A Diversity Framework*. 2nd revised edition. New Brunswick and London: Aldine Transaction.

- Nordquist, R. 2013. *English as a Second Language*.
<http://grammar.about.com/od/e/g/English-As-A-Second-Language-Esl.htm>
 (Accessed 14 February 2013).
- Oesterreich, L. (2004). *Understanding Children: Language development*
<http://www.extension.iastate.edu/Publication/PM1529F.pdf>
 (Accessed 7 August 2012).
- Orega, L. 2009. *Understanding Second Language Acquisition*. London: Hodder Arnold Publication.
- Oswalt, A. 2010. *Cognitive Development: Piaget Part III*, edited by M Dombeck.
http://www.mentalhelp.net/poc/view_doc.php?type=doc&id=37679&cn=1272
 (Accessed 20 June 2012).
- Oxford Dictionaries. 2012. *Language*.
<http://oxforddictionaries.com/definition/english/language> (Accessed 16 July 2012).
- Pang, ES., Muako, A, Bernhardt, EB & Kamil, ML. 2003. *Teaching Reading*. Geneva: International Bureau of Education.
- Padgett, DK. 1998. Qualitative Methods in Social Work Research: Challenges and Rewards. In De Vos, AS, Strydom, CB, Fouché & Delpont, CSL. 2005. *Research at Grass roots. For the social sciences and human service professions*. 3rd Edition. Pretoria: Van Schaik.
- Papalia, DE. & Feldman, RD. 2011. *A child's world: Infancy through adolescence*. 12th Edition. New York: The McGraw-Hill Companies.
- Paradis, J. 2011. Individual differences in child English second language acquisition: Comparing child-internal and child-external factors. *Linguistic Approaches to Bilingualism* 1:3, 213-237. University of Alberta: John Benjamins Publishing Company.
- Pearson, D.2004. "The Reading Wars". In Tomlinson, B. 2007. *Language acquisition and development: Studies of learners of first and other languages*. New York, NY: Continuum.
- Piaget, J. 1952. The origins of intelligence in children. In Papalia, DE & Feldman, RD. 2011. *A child's world: Infancy through adolescence*. 12th Edition. New York: The McGraw-Hill Companies.
- Piaget, J & Inhelder, B. 1967. The child's conception of space. In Papalia, DE. & Feldman, RD. 2011. *A child's world: Infancy through adolescence*. 12th Edition. New York: The McGraw-Hill Companies.
- Republic of South Africa. 1996. Chapter 2 – Bill of Rights (29).
<http://www.info.gov.za/documents/constitution/1996/96cons2.htm#29> . (Accessed 18 March 2011).

Republic of South Africa (RSA). 1996. *The South African school Act*. Pretoria: Government Printer.

Rinzler, CA. 2011. *Nutrition for Dummies*. 5th Edition. Indiana: Wiley Publishing, Inc.
Ritchie, WC & Bhatia TK (Eds). 2009. *The New Handbook of Second Language Acquisition*. 2nd Edition. Bingley: Emerald Group Pub Limited.

Robertson, K & Ford, K. 2008. *Language Acquisition: An Overview*.
<http://www.colorincolorado.org/article/26751/> (Accessed 24 July 2002).

Roessingh, H., Kover, P & Watt, D. (2005). Developing cognitive academic language proficiency: the journey. *TESL Canada Journal*, 23, 1–27. In Paradis, J. 2011. Individual differences in child English second language acquisition: Comparing child-internal and child-external factors. *Linguistic Approaches to Bilingualism* 1:3, 213-237. University of Alberta: John Benjamins Publishing Company.

Rose, J. 2006. *Independent review of the teaching of early reading: Final Report*. Department for education and skills: UK government.

Rowlingson, K. 2011. *The different types of phonics*
http://www.astepatatime.co.nz/what_is_synthetic_phonics.htm (Accessed 19 July 2011).

Rubin, A & Babbie, E. 2009. *Research methods for social work*. 7th Edition. USA: Brooks/Cole, Centage Learning.

Sandhyarani, N. 2000-2012. *Vitamins and Minerals and Their Roles*.
<http://www.buzzle.com/articles/vitamins-and-minerals-and-their-roles.html> (Accessed 12 March 2012).

Sawyer, M & Ranta, L. (2002). Aptitude, individual differences, and instructional design. . In Paradis, J. 2011. Individual differences in child English second language acquisition: Comparing child-internal and child-external factors. *Linguistic Approaches to Bilingualism* 1:3, 213-237. University of Alberta: John Benjamins Publishing Company.

Schifferdecker, S. 2011. *What do Theorists Say about Teaching Children to Read?*
http://www.ehow.com/about_6529459_do-say-teaching-children-read_.html
(Accessed 2 November 2011).

Sedita, J. 2001. What Every Educator and Parent Should Know About Reading Instruction. *The Journal*. 11(4) LDAM of Massachusetts. Updated in 2008 (1-7).
www.keystoliteracy.com/reading-comprehension/professional-development/research-based-reading-instruction.pdf (Accessed 23 October 2011).

Shaywitz, S. 2003. Overcoming dyslexia. In Attwill, K, Blanchard, J, Gorin, JS & Burstein, K. 2007. Receptive vocabulary and cross-language transfer of phonemic awareness in kindergarten children. *The Journal of Educational Research*, 100(6), 336.

Shisana O, Mehtar S, Mosala T, Zungu-Dirwayi N, Rehle T, Dana P, Colvin M, Parker W, Connolly C, Dunbar R & Gxamza F (2005) HIV risk exposure among young children: A study of 2–9 year olds served by public health facilities in the Free State, South Africa. In Shisana, O., Simbayi, LC., Rehle, T., Zungu, NP, Zuma, K, Ngogo, N., Jooste, S., Pillay-Van Wyk., Parker, W., Pezi, S., Davids, A., Nwanyanwu, O., Dinh, TH & SABSSM III Implementation Team. 2010. *National HIV Prevalence, Incidence, Behaviour and Communication Survey, 2008: The health of our children*. Cape Town: HSRC Press.

Shisana, O., Simbayi, LC., Rehle, T., Zungu, NP., Zuma, K, Ngogo, N, Jooste, S, Pillay-Van Wyk., Parker, W, Pezi, S, Davids, A, Nwanyanwu, O, Dinh, TH & SABSSM III Implementation Team. 2010. *National HIV Prevalence, Incidence, Behaviour and Communication Survey, 2008: The health of our children*. Cape Town: HSRC Press.

Shriver, EK. 2010. *Put Reading First: Kindergarten Through Grade 3*. http://www.nichd.nih.gov/publications/pubs/prf_k-3/pages/prf-teachers-k-3-phonics.aspx (Accessed 15 October 2011).

Smith, SB, Simmons, DC, & Kameenui, EJ. 1998. Phonological awareness: Research bases. In Giambo, DA & Mckinney JD. 2004. The effects of a phonological awareness intervention on the Oral English Proficiency of Spanish-speaking kindergarten children. *TESOL Quarterly* 38(1), 95-117.

Späth, A. 2013. *What is occupational therapy?* http://www.parent24.com/Preschool_2-6/development_behaviour/What-is-occupational-therapy-20090904 (Accessed 16 February 2013).

Statistics South Africa. 1996. *The people of South Africa population census 1996*. <http://www.statssa.gov.za/census01/Census96/HTML/default.htm> (Accessed 8 April 2009).

Stephanie. 2009-2012a. *Teaching how to read*. <http://www.childrens-books-and-reading.com/teaching-how-to-read.html> (Accessed 10 May 2011).

Stephanie. 2009-2012b. *Synthetic Phonics*. <http://www.childrens-books-and-reading.com/synthetic-phonics.html> (Accessed 31 October 2011).

Straker, D. 2000-2012. Types of validity. http://changingminds.org/explanations/research/design/types_validity.htm (Accessed 12 October 2012).

Swart, R, Sanders, D & McLachlan, M. 2008. Nutrition: A Primary Health Care Perspective. In: Barron, P & Roma-Reardon, J. Editors. *South African Health Review 2008*. Durban: Health Systems Trust.

Tangel, DM, & Blachman, BA. 1992. Effect of phoneme awareness instruction on kindergarten children's invented spelling. In Giambo, DA & Mckinney JD. 2004. The effects of a phonological awareness intervention on the Oral English Proficiency of Spanish-speaking kindergarten children. *TESOL Quarterly* 38(1), 95-117.

- Teele, S. 2004. *Overcoming Barricades to reading: A Multiple Intelligences Approach*. California: Corwin Press.
- Thompson, GB & Nicholson, T. (1999) Learning to read: Beyond phonics and whole language. In Teele, S. 2004. *Overcoming Barricades to reading: A Multiple Intelligences Approach*. California: Corwin Press.
- THRASS Information Brochure. 2011. *For teaching English as a first or other language*. <http://www.thrass.com.au/about1.htm> (Accessed 10 April 2009).
- Tolbert, J. 1999-2011. *Phonics teaching methods*. http://www.ehow.com/list_6311622_phonics-teaching-methods.html (Accessed 19 July 2011).
- Tomlinson, B. 2007. *Language acquisition and development: Studies of learners of first and other languages*. New York, NY: Continuum.
- Torgesen, JK, Morgan, ST, & Davis, C. 1992. Effects of two types of phonological awareness training on word learning in kindergarten children. In Giambo, DA & Mckinney JD. 2004. The effects of a phonological awareness intervention on the Oral English Proficiency of Spanish-speaking kindergarten children. *TESOL Quarterly* 38(1), 95-117.
- Treiman, R. 1993. Beginning to Spell: A study of First-Grade Children. In Davies, A & Ritchie, D. 2003. *Teaching handwriting, reading and spelling skills*. London: THRASS (UK).
- UNAIDS. 2008. Report on the global AIDS epidemic. In Shisana, O., Simbayi, LC, Rehle, T, Zungu, NP, Zuma, K, Ngogo, N, Jooste, S, Pillay-Van Wyk., Parker, W, Pezi, S, Davids, A, Nwanyanwu, O, Dinh, TH & SABSSM III Implementation Team. 2010. *National HIV Prevalence, Incidence, Behaviour and Communication Survey, 2008: The health of our children*. Cape Town: HSRC Press.
- Unsworth, S. (2005). Child L2, adult L2, child L1: Differences and similarities. A study on the acquisition of direct object scrambling in Dutch (doctoral dissertation). In Paradis, J. 2011. Individual differences in child English second language acquisition: Comparing child-internal and child-external factors. *Linguistic Approaches to Bilingualism* 1:3, 213-237. University of Alberta: John Benjamins Publishing Company.
- Wagner, RK., Torgensen, JK & Rashotte, CA.1994. The development of reading-related phonological processing abilities: New evidence of a bi-directional causality from a latent variable longitudinal study. In Giambo, DA & Mckinney JD. 2004. The effects of a phonological awareness intervention on the Oral English Proficiency of Spanish-speaking kindergarten children. *TESOL Quarterly* 38(1), 95-117.
- Wellhousen, K. 2002. *Outdoor play, every day: Innovative play concepts for early childhood*. New York: Delmar.

Whitney, E & Rolfes, SR. 2008. *Understanding Nutrition*. 11th Edition. Belmont: Thomson Wadsworth.

WHO (2004) Antiretroviral drugs and the prevention of mother-to-child transmission of HIV infection in resource-limited settings. Report of a technical consultation, Geneva, Switzerland, 5–6 February 2004. In Shisana, O., Simbayi, LC., Rehle, T, Zungu, NP., Zuma, K, Ngogo, N, Jooste, S, Pillay-Van Wyk., Parker, W, Pezi, S, Davids, A, Nwanyanwu, O, Dinh, TH & SABSSM III Implementation Team. 2010. *National HIV Prevalence, Incidence, Behaviour and Communication Survey, 2008: The health of our children*. Cape Town: HSRC Press.

Wilson, SY. & Liepolt, W. 2004. *Workshop: Constructivism as a Paradigm for Teaching and Learning*
<http://www.thirteen.org/edonline/concept2class/constructivism/index.html> .
(Accessed 5 December 2011).

Wren, S. 2003. *What does a “balanced approach” to reading instruction mean?*
<http://www.balancedreading.com/balanced.html> (Accessed 7 December 2011).

Wright, A. 1999-2011. *Teaching Phonics to ESL Students*.
http://www.ehow.com/how_5479256_teaching-phonics-esl-students.html (Accessed 26 November 2011).

Wright. J. 2006. Cracking the literacy puzzle in South Africa. *The Official Magazine of Royal College of Speech and Language Therapists*, March, 18-19.
<http://www.thrass.co.uk/downloads> (Accessed 8 April 2009).

Yaqub, S. 2002. Poor children grow into poor adults: Harmful Mechanisms or over-deterministic theory. In Behrman, J.R., Alderman, H., & Hoddinott, J. 2004. *Hunger and Malnutrition. Copenhagen Consensus – Challenges and Opportunities*
http://greencardeb5expert.com/PDF/Hunger_and_Malnutrition.pdf (Accessed 25 March 2012).

Zdorenko, T. (2010). Constructions in child second language acquisition: Exploring the role of first language and usage (Unpublished doctoral dissertation). In Paradis, J. 2011. Individual differences in child English second language acquisition: Comparing child-internal and child-external factors. *Linguistic Approaches to Bilingualism* 1:3, 213-237. University of Alberta: John Benjamins Publishing Company.

Zdorenko, T & Paradis, J. (2011). Articles in child L2 English: When L1 and L2 acquisition meet at the interface. *First Language*. doi: 10.1177/0142723710396797. In Paradis, J. 2011. Individual differences in child English second language acquisition: Comparing child-internal and child-external factors. *Linguistic Approaches to Bilingualism* 1:3, 213-237. University of Alberta: John Benjamins Publishing Company.

APPENDIX A

P.O. Box XXXXX
XXXXXX XXXXXX
XXXX

Mr S. XXXXXXXXX
XXXXXX XXXXXX School
XXXX XXXXXX XXXXXX

Date:

RE: Consent to conduct research to Grade 2 learners

Dear Principal and School Management team

I am currently a Master's student at the University of South Africa (UNISA) and I wish to conduct research required for degree in the field of Inclusive Education. The aim of the research is to determine whether the THRASS methodology will possibly improve the reading and spelling abilities of Grade 2 English second language learners.

The research will take place as follows:

- The research will take place over a period of two years.
- A reading and spelling test will be conducted at the end of the learners' Grade 1 and 2 years and their scores will be compared.
- The THRASS phonics programme will be implemented to the Grade 2X class. This class will be the experimental group. Kind permission has been granted by the class teacher. The other Grade 2 class will be the control group.
- The learners will also be observed in their classroom in order to determine the frustrations the learners experience in a classroom situation.

I undertake to consider the following:

- The research will not interfere with the learners' schoolwork, in fact, the learners will be taught the work that is stipulated by the department.
- The research will be conducted professionally at all times.
- All the information gathered over the two years will be kept strictly confidential.
- The research results will be disclosed to the School Management Team upon their request.
- The results obtained will enable the school to make an informed decision about the phonics programme that is implemented at the school.
- The learners may only participate in the research once the learner has provided the researcher with a signed reply from his or her parents indicating that permission has been obtained.
- The research will take place during class time where the Grade 2 X teacher has indicated the available time.

Thanking you in advance.

Yours Sincerely

.....

Lee-Anne Goosen

UNISA Student Number: 30948533

UNISA Supervisor: Professor A.J Hugo

APPENDIX B

CONSENT LETTER

Dear Parent/Caregiver

I am currently a Master's student at the University of South Africa (UNISA) and I wish to conduct research required for the degree in the field of Inclusive Education. The aim of the research is to determine whether the THRASS methodology will possibly improve the reading and spelling abilities of Grade 2 English second language learners.

In South Africa, the topic of reading has been of great interest on the development of language since it has been estimated that 12 million learners will go through the education system per year. A key concern for all these learners is language. The majority of South African learners do not speak English as their home language, yet the dominant language of learning and teaching (LoLT) is English. It is important for these learners to become fluent in the LoLT as the future of education is dependent upon it. South Africa has been struggling since 2001 to implement a programme in schools that will improve the Literacy abilities of learners.

The focus of the research is to implement the THRASS phonics programme and to determine whether the reading and spelling levels of Grade 2 English second language learners improves after receiving the THRASS programme. It is also the aim of the research is to effectively use the data from the research, which may benefit your child, as well as other children who are receiving their education in South Africa. I friendly request you, as the parent or caregiver, to allow your child to participate in this research assignment. **Consent to conduct the research was granted with the blessing of XXXXXXXXXXXXX Primary.** Assurance has been given that the research will be handled with the strictest of confidentiality.

By granting your consent, your child will be required to participate in the THRASS phonics programme that will take place every day for 30 minutes. All research activities will take place during school hours and will be conducted on the school premises. You are welcome to inform your child about the research and what it will entail; however, the procedure will also be explained before commencing with the research.

Yours sincerely

Lee-Anne Goosen

Supervisor: Prof A.J. Hugo

Department of Education Studies

University of South Africa

UNISA

PARENTS/CAREGIVERS: CONSENT

Title of research assignment:

Teaching, reading and spelling in Grade 2 English second language classes through THRASS methodologies

DECLARATION OF PARENTS/CAREGIVERS:

I, _____ the undersigned, in my capacity as parent/caregiver (delete the inappropriate option) of _____ (child) _____

(address) hereby give consent to my child's participation in the above-mentioned assignment.

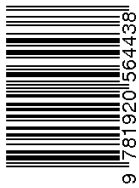
Signed at _____ on _____ 2011/2012.

Signed (Parent/Caregiver) _____

APPENDIX C

THRASS® PICTURECHART

T-03



9 781920 564438 >



Bidvest
Paperplus

IT IS ILLEGAL TO COPY, SCAN, STORE OR TRANSMIT THIS CHART
CREATED & DESIGNED BY ALAN DAVIES AND DENYSE RITCHE
© 1998 BIDVEST PAPERPLUS ISBN 978-1-920564-43-8
THRASS AFRICA (PTY) LTD TEL: +27 12 523 1000

ant
a *

baby
a a-e ai ay *

tape
a a-e ai ay *

snail
a a-e ai ay *

tray
a a-e ai ay *

hair
air are *

square
air are *

car
ar a *

banana
ar a *

bed
e ea *

bread
e ea *

me
e ea ey y *

beach
e ea ey y *

tree
e ea ey y *

key
e ea ey y *

pony
e ea ey y *

ear
ear eer *

deer
ear eer *

teacher
er ar or ur *

collar
er ar or ur *

doctor
er ar or ur *

measure
er ar or ur *

zebra
er ar or ur *

garden
er ar or ur *

circus
er ar or ur *

fern
er ar or ur *

shirt
er ar or ur *

worm
er ar or ur *

fur
er ar or ur *

tin
i e *

rocket
i e *

kite
i i-e igh y *

light
i i-e igh y *

fly
i i-e igh y *

frog
o a *

swan
o a *

nose
o oa o-e ow *

boat
o oa o-e ow *

note
o oa o-e ow *

snow
o oa o-e ow *

coin
oi oy *

toy
oi oy *

book
oo u *

bull
oo u *

moon
oo ew ue *

screw
oo ew ue *

glue
oo ew ue *

moor
oor *

fork
or a au aw oor *

ball
or a au aw oor *

sauce
or a au aw oor *

saw
or a au aw oor *

door
or a au aw oor *

cow
ow ou *

house
ow ou *

bus
u o *

glove
u o *

1998 BIDVEST PAPERPLUS (PTY) LTD

APPENDIX D

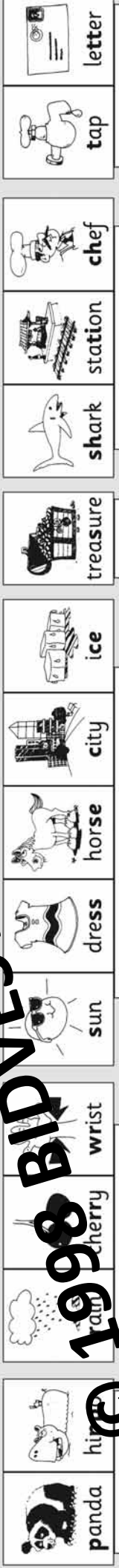
a A b B c C d D e E f F g G h H i I j J k K l L m M n N o O p P q Q r R s S t T u U v V w W x X y Y z Z



bird bb * rabbit ch ck ch q * cat kitten duck school queen chair dog ladder fish coffee dolphin gate egg



hand * jam giant cage bridge leg bell mouse net dinner king ink



panda pp * rain cherry wrist sun dress horse city ice treasure shark station chef tap letter



thumb th * feather th * voice sleeve v ve * water wheel wh u * quilt yawn y * zip fizz ze s se * sneeze laser se * cheese

1998 BIDVEST PAPERPLUS (PTY) LTD