

**The effect of second language storybook reading and interactive vocabulary instruction on the vocabulary acquisition of Grade 1 learners**

By

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Submitted in fulfilment of the requirements for the degree of

MASTERS OF ARTS

In the subject

APPLIED LINGUISTICS

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF. NM KLAPWIJK

JANUARY 2018

## **ABSTRACT**

The study sets out to add to the research base on vocabulary acquisition by assessing the effect of integrating explicit, interactive vocabulary instruction with storybook reading on Grade 1 vocabulary acquisition. Participants comprised 69 Grade 1, English second language learners from three classes in two schools. One class was randomly assigned as the Experimental Group while the other two classes served as control groups. The intervention took place for a period of 18 weeks and consisted of 30 minute storybook reading sessions, accompanied by interactive vocabulary instruction, twice a week. Data regarding existing vocabulary instruction practices and approaches were also collected through classroom observations and individual, semi-structured interviews with the Experimental Group's teacher. Findings suggest that second language storybook reading, accompanied by explicit, interactive vocabulary instruction, has a positive impact on Grade 1 vocabulary acquisition, but that vocabulary teaching practices also play a key role in vocabulary acquisition.

## DECLARATION

I, Lenore van den Berg (Student No: 8762376), declare that "*The effect of second language storybook reading and interactive vocabulary instruction on the vocabulary acquisition of Grade 1 learners*" is my own original work and that all consulted sources have been clearly acknowledged in the form of in-text references and by means of a reference list.

Signature:

A handwritten signature in black ink, appearing to read 'L van den Berg', written in a cursive style.

Date: 20 May 2018

## ACKNOWLEDGEMENTS

I would like to express my deepest appreciation and gratitude to Professor Klapwijk for her insightful comments, unerring judgement and constant guidance. I can honestly say that, without her generous support and patience, this thesis would not have materialised.

For me, the process of writing the thesis was a steep learning curve and I often felt like Pip in *Great Expectations* struggling “through the alphabet as if it [was] a bramble-bush; getting considerably worried and scratched by every letter” (Dickens, 1998:75). But I have learned a tremendous amount and, like all challenges, at the end I am better for it.

My gratitude to all my friends and loved ones for patiently listening and for their continued moral support and encouragement throughout the whole process.

And last, but not least, thank you to my family for their patience and understanding; especially to my mom and Michelle for the endless cups of tea and to Pieter for the technical support.

Blessed be.

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# **CHAPTER 1**

## **INTRODUCTION AND BACKGROUND**

### **1.1 INTRODUCTION**

Chapter One will provide a broad orientation of the study, introducing second language vocabulary research as the focus of interest within the field of Applied Linguistics. The chapter will contextualise the main research problem and provide a brief background to the problem with special reference to the socio-economic conditions and the education system in South Africa. This is followed by discussing the purpose and significance of the study, stating the intended contribution of the research towards second language vocabulary instruction. Thereafter, the research design is set out and the research questions and hypothesis will be stated. Chapter One will conclude with an outline of the forthcoming chapters in the study, presenting a brief discussion on the relevance and purpose of each chapter.

### **1.2 BACKGROUND TO THE PROBLEM**

In accordance with the multifaceted nature of vocabulary acquisition (Zimmerman, 1997; Wilsenach, 2015) there are many different theoretical frameworks and research perspectives surrounding second language vocabulary teaching and learning. In order to choose the most relevant approach(es) for the current study a literature review was done which included examining various research studies and articles about exploring successful strategies for vocabulary instruction. These studies and articles presented various theoretical frameworks; frameworks with a justification and basis for successful strategies for vocabulary instruction. However, these frameworks need to be interpreted within the context of the historical period in which they had been developed.

Vocabulary is only one aspect of second language (L2) acquisition. Nevertheless, many L2 learners regard vocabulary learning as a priority and the most important part of learning a new language (Sökmen, 1997:237). In addition, L2 learners often struggle with vocabulary and express a desire for more vocabulary instruction in the classroom (Folse, 2004). Research (McKeown & Beck, 2011) has shown that a lack of vocabulary hinders reading comprehension, prevents learners from becoming proficient L2 readers and writers, and from communicating effectively in the L2.

Furthermore, vocabulary is a vital element in literacy and literacy, in turn, is a key component of overall academic performance (Beck, Perfetti & McKeown, 1982; Wilsenach, 2015; Pretorius, Jackson, McKay, Murray & Spaul, 2016).

Nonetheless, despite the central role that vocabulary plays in L2 acquisition, vocabulary research was very much a Cinderella subject during the 1970s and 1980s (Meara, 2002). During this time, research, as well as L2 classroom activities, focused on grammar, phonology and syntax. In the classroom, teachers spent little to no time teaching vocabulary. This is reflected by the results of a survey done by Zimmerman (1997). In fact, it is only during the last thirty years that vocabulary teaching and learning seem to have started receiving more dedicated attention in L2 acquisition research (Meara, 2002).

In 1965 Chomsky developed the idea of a universal grammar (UG) and proposed that all humans have an innate, biological ability to acquire a language. In other words, humans are born with a built-in ability to acquire a language (Brown, 2007). Chomsky's general framework would become one of the most influential theories of language acquisition in the nineteenth century (Sökmen, 1997). Although Chomsky's work is mainly concerned with first language (L1) acquisition, L2 research is guided by the same considerations as L1 acquisition research (Beck, McKeown & Kucan, 2002; Brown, 2007) and consequently Chomsky's studies seem to have had an influence on second language research as well.

Due to the dominance of the Chomskyan School of linguistics and the belief that language is an innate faculty, vocabulary acquisition was neglected in favour of syntactic and phonological development in the classroom (Sökmen, 1997). Moreover, during the late 70s and early 80s, L2 acquisition research centred on "how the action of learners might affect their acquisition of language" (Schmitt, 1997:199). Researchers focused on learner-centred aspects, maintaining that successful learners employ a variety of learning strategies to facilitate language learning and that these strategies should be studied and taught to underachieving learners (Schmitt, 1997).

However, during the late 1980s there was a realisation that many L2 learners' language difficulties, both receptively and productively, stemmed from an inadequate vocabulary (Nation, 1990; Laufer, 1998). Concurrently, due to the popularity of the

communicative approach, which underscores the social and communicative aspects of language, the focus of language education shifted from knowing the structure of a language to being able to communicate in the language (Zimmerman, 1997). The communicative approach had a significant effect on vocabulary research since 'lexical competence' was considered to be at the 'heart of communicative competence' (Meara, 1996:35). This resulted in researchers placing greater emphasis to vocabulary acquisition as an area of research (Nation, 1990).

In 1989, building on existing research, Krashen put forward his input hypothesis (Krashen, 1989). According to this theoretical framework, L2 (and L2 vocabulary) learning does not require instruction, but is acquired automatically through exposure to the L2 in the form of listening, reading, speaking and writing (Coady, 1997). The results of Krashen's 1989 research into vocabulary acquisition as a by-product of reading comprehension were in line with early research into first language (L1) vocabulary acquisition by Nagy and Herman (1985) which determined that vocabulary can be acquired implicitly and incidentally through extensive reading. In fact, Krashen (2004:1) later expanded the input hypothesis, renaming it the comprehension hypothesis, and distinguishing between subconscious acquisition and conscious learning, stating that there is a causal relationship between input and acquisition and that language is learned in a specific order.

The 1990s and 2000s produced a wealth of empirical studies in the field of L2 vocabulary learning (Read, 2004), with the main focus on incidental vocabulary acquisition through reading interventions and extensive reading programmes (Van Zeeland & Schmitt, 2013). The predominant theoretical framework at that time was that incidental vocabulary acquisition would take place automatically and unconsciously when learners were exposed to the L2 (Hulstijn, 2001). As a result, educationalists advocated activities encouraging incidental vocabulary learning (like group reading and listening activities) while, at the same time, discouraging teaching practices explicitly instructing vocabulary in the classroom (Krashen, 1989; Read, 2004). Consequently very little research was done about L2 vocabulary teaching methods during this time.

However, as the body of L2 acquisition research increased, researchers and educationalists realized that incidental input alone is not sufficient to explain

language and vocabulary acquisition (Hulstijn, 2001). Elley (1989) and Penno, Wilkinson and Moore (2002) found that although incidental learning increases vocabulary, this type of instruction might not be the most effective way to teach vocabulary (Sökmen, 1997). Researchers shifted their emphasis to a more direct way of teaching vocabulary; incorporating explicit instruction and studies into vocabulary acquisition and another dimension was added – teaching strategies to facilitate word learning (Sökmen, 1997). As a result, the role of vocabulary in language pedagogy was re-evaluated and brought about a change in language teaching (Zimmerman, 1997). L2 teachers were now encouraged to actively and explicitly teach vocabulary, making use of various vocabulary teaching strategies to enhance word learning (Biemiller & Boote, 2006). A teaching strategy that was found to be particularly effective for language development and vocabulary acquisition is shared reading, a technique in which storybooks are read aloud to learners (refer 2.4.2) (Ard & Beverly, 2004; Beck & McKeown, 2007). Shared reading is an interactive reading practice where teachers read enlarged texts to learners which allows for learners to actively join in the reading process (Fountas & Pinnell, 1996).

Today, an improved and more holistic approach to L2 vocabulary teaching is advocated (Hoffman, Teale & Paciga, 2014). This integrated framework incorporates incidental learning of vocabulary with direct instruction; including a variety of explicit and focused activities. Ultimately, the strategy of combining implicit learning and explicit instruction of vocabulary has proven to be the most effective way to improve L2 word knowledge (Sökmen, 1997; Hoffman *et al.*, 2014).

### **1.2.1 The South African context**

In the context of this study, and within the broader discipline of Applied Linguistics, the complexities of the South African education system need to be addressed specifically. Because of the country's divided history, schools in South Africa face unique challenges. The South African education system has undergone considerable transformation and changes over the last three decades. The process started with the introduction of Outcome-Based Education (OBE), the first education curriculum of the post-apartheid government. OBE was introduced to rectify past inequalities in the education system and improve the standard of education. In addition, OBE focused on skills development in order to prepare learners more successfully for the

world of work (Mason, 1999). Although some of the changes were positive, there was still considerable room for improvement. OBE was reviewed in 2000 and this led to a series of revised curriculums, culminating in the currently-used product in 2012: the South African Department of Education's new Curriculum and Assessment Policy Statement (CAPS).

The CAPS document specifies that, in the Foundation Phase (Grades R 1 - 3) a First Additional Language (English) should be taught in all schools (Department of Basic Education, 2011a). In addition, in most South African schools English becomes the language of learning and teaching (LoLT) in Grade 4, this despite the fact that most South African learners do not have English as their home or first language (Taylor & Coetzee, 2013). It is therefore imperative that learners are able to read and write well in English at the end of the Foundation Phase in Grade 3, because from Grade 4 English tends to be used for all their subjects.

Another factor that needs to be taken into account when looking at the South African education system is social-economic status (SES). Research (Hart & Risley, 1995; Beck & McKeown, 2007; Wilsenach, 2015) has revealed that there is a difference in vocabulary size between economically disadvantaged learners (learners with a low socio-economic status, or SES) and their middle class peers (refer Section 2.7). Beck and McKeown (2007) refer to studies indicating that Grade 1 learners from a higher SES have twice the vocabulary size of learners from low socio-economic backgrounds. Regrettably, once these differences have been established they tend to persist and, in fact, grow larger as learners continue their schooling (Stanovich, 1986; Biemiller & Slonim, 2001; Penno *et al.*, 2002; Wilsenach, 2015). Vygotsky's (1978) zone of proximal development has further ramifications for the vocabulary gap between learners. According to Vygotsky (1978), learning and development take place within a social context and is an interactive process. This is essentially a social constructivist view and suggests that learning is facilitated by adults, parents and teachers within a learner's environment. Consequently, learners from a low SES, who grow up in an environment lacking resources and who have limited interaction with literate adults and/or parents do not have the same support and learning opportunities their middle class peers have (Spaull, 2015).

In addition, Vygotsky's (1978) zone of proximal development (refer 2.6.4) gave rise to the concept of scaffolding. The implication of scaffolding for L2 vocabulary acquisition is that the more words learners know the easier it becomes for them to learn new words. Stanovich's (1986) theory of the Matthew effect (refer 2.7) offers additional support for the notion claiming that learners who struggle to read, read very little, thereby missing vital opportunities to grow their vocabulary. In other words, learners from low SES families will, in all probability, enter school with a limited vocabulary, as opposed to their peers from higher SES families who will have a more developed and larger vocabulary. This difference in vocabulary size will then, because of scaffolding and the Matthew effect, grow larger as learners progress in school; making vocabulary instruction in schools all the more important.

Spaull (2015:29) writes about the dualistic nature of the South African education system and argues that there is a 'bimodal distribution of performance.' In post-apartheid South African school achievement and success no longer seem to be based on race but on socio-economic status, with a small group of learners from the higher socio-economic backgrounds (roughly 20 – 25%) attending well-functioning and well equipped schools, while the majority of learners from poorer, rural areas are excluded from these schools and receive low(er) quality education. This unequal distribution of resources is an integral part of the fabric of South African society and places the majority of learners at an academic disadvantage and has a debilitating effect on their school performance.

### **1.3 STATEMENT OF THE PROBLEM**

Empirical research into L2 vocabulary acquisition reveals that the size of a learner's oral vocabulary at the end of Grade 1 is an effective indicator of reading comprehension in high school (Cunningham & Stanovich, 1997; Biemiller, 2004). Since reading comprehension is vital to literacy, and literacy is vital to overall academic performance (Pretorius & Mampuru, 2007; Pretorius *et al.*, 2016; Sibanda, 2017) it is reasonable to argue that vocabulary knowledge is crucial for academic success. Vocabulary predicts later achievement (Wilsenach, 2015). Therefore, the earlier learners can acquire a large and extensive vocabulary the better their reading comprehension and academic performance will be in higher grades (Hirsch, 2003).

Nevertheless, notwithstanding the importance of word knowledge in projecting academic achievement, studies indicate that there is still little emphasis on vocabulary teaching in school curriculums (Beck & McKeown, 2007; Pretorius & Mampuru, 2007; Wilsenach, 2015). What further complicates the situation is that, despite the various theories and studies trying to explain the different elements of vocabulary acquisition, it remains, as Schmitt (1998:281) argues, “one of the most intriguing puzzles in second language acquisition.”

In South Africa, learners in Grade 4 (when English becomes the LoLT), frequently have poor English communication and comprehension skills and inadequate English vocabulary and proficiency (Pretorius & Mampuru, 2007; Sibanda, 2014; Wilsenach, 2015). The low level of English L2 proficiency in the Foundation Phase was illuminated by the underperformance of South African Primary School learners in the Annual National Assessments (Spaull, 2012). In addition, South African learners had the lowest average score of all developing countries taking part in international assessments like the Progress in International Reading Literacy Study (PIRLS). In the 2011 PIRLS study South African Grade 4 learners performed worse than poorer countries, such as Kenya, Swaziland and Tanzania (Van der Berg *et al.*, 2011; Spaull, 2015). And in the PIRLS 2016 study South Africa was again the lowest performing country, with a mean score at 320 points (Howie, Combrinck, Roux, Tshele, Mokoena & Palane, 2017).

Additionally, differences in socio-economic status and the resulting documented gap in vocabulary knowledge between economically advantaged and disadvantaged young learners are prevalent in South African schools (Hart & Risley, 1995; Spaull, 2015). In light of the importance of English within the South African school system, as well as the importance of literacy for academic achievement the inadequate level of English L2 proficiency (including, but not limited to, poor literacy, reading comprehension and vocabulary) in the Foundation Phase is worrying. In higher grades, these learners will be at a disadvantage academically (Pretorius, 2002) and will not be able to cope with the demands of mathematics, science, geography and history in their L2.

Taking all of the above into account, the problem, identified by the current study, can be summarised as follows: South African learners do not develop a sufficiently

comprehensive L2 vocabulary in the Foundation Phase (Grades 1 – 3) to enable them to cope with the demands of English as a LoLT in the higher grades. The situation is exacerbated by socio-economic factors with the majority of learners living in low SES, rural areas where they receive low-quality education. It is exceedingly difficult for these learners to make up the L2 vocabulary deficit or to adequately manage high school curriculums, resulting in a high drop-out rate in South African secondary schools (Spaull, 2015).

In the light of the above the present study is of the opinion that there is an urgent need for early vocabulary intervention in the Foundation Phase in South African schools. At the same time, it is imperative to work towards closing the gap in vocabulary knowledge between the different socio-economic groups. In order to solve this particular problem more research into L2 vocabulary acquisition and learning strategies, focused specifically on lower grades, needs to be done.

#### **1.4 PURPOSE OF THE STUDY**

The overall focus of this study is on second language vocabulary acquisition and vocabulary learning strategies. Within this broad field of study the problem being addressed is that during the Foundation Phase South African learners do not acquire a large and rich enough vocabulary to cope with the demands of English as a LoLT in higher grades. From the problem statement one could surmise that the current methods used to teach L2 vocabulary in the Foundation Phase are not very effective and that more intensive vocabulary instruction needs to take place. Consequently, the purpose of the study is to not only investigate effective methods for teaching L2 vocabulary in Grade 1 classrooms, but to also find ways to best implement these teaching strategies in the classroom (Sökmen, 1997).

L2 acquisition research reveals the importance of storybook reading for vocabulary acquisition (Elley, 1989; Biemiller & Boote, 2006), and more specifically interactive reading accompanied by explicit vocabulary instruction (Beck *et al.*, 2002; Lesaux, Kieffer, Faller & Kelley, 2010). In accordance with these findings and in response to the research problem the specific purpose of the current study is to explore whether or not L2 storybook reading, accompanied by explicit, interactive vocabulary instruction, will have a positive effect on the vocabulary acquisition of Grade 1 learners.

## **1.5 SIGNIFICANCE OF THE STUDY**

It is hoped that the results of the study will provide insight into teaching strategies to most effectively teach young learners additional language vocabulary in the first year(s) of their formal schooling. In this way, the study can make a contribution to the body of knowledge comprising of second language teaching and learning practices in schools and in the Department of Education in South Africa.

Ultimately, it is the intent of the researcher that the study may contribute towards the future development of an easy-to-follow and workable framework of vocabulary instruction that can be implemented to effectively teach L2 vocabulary in the Foundation Phase. A comprehensive framework that will empower teachers, enabling them to enhance learners' knowledge of vocabulary that is needed for academic success in school.

The field of Applied Linguistics continues to evolve as researchers generate new studies and findings which develop theory, inform practice and identify elements for further studies. Seen against the backdrop of this dynamic process the researcher hopes that the current study will make a small contribution towards the central goal of constantly working towards improving our learners' literacy development and ultimately the quality of education in our country.

## **1.6 RESEARCH QUESTIONS AND HYPOTHESIS**

The study is informed and guided by three research questions, with Research Question 1 being the primary research question. The three research questions, and accompanying hypothesis for Research Question 1, are as follows:

### **Research Question 1:**

- How does second language storybook reading, accompanied by explicit, interactive vocabulary instruction, impact on the vocabulary acquisition of Grade 1 learners?

This research question can be formulated into the resulting hypothesis:

- Second language storybook reading, accompanied by explicit, interactive vocabulary instruction, will have a positive impact on the vocabulary acquisition and development of Grade 1 learners.

### **Research Question 2:**

- What are the existing vocabulary instruction practices in the participating Grade 1 classes?

No hypothesis was formulated from Research Question 2.

### **Research Question 3:**

- What are the changes, if any, in the Experimental Group Teacher's attitude and approach to vocabulary instruction before and after the intervention?

No hypothesis was formulated from Research Question 3.

## **1.7 RESEARCH DESIGN**

The research problem and research questions informed the choice of research design for this study and as a result, a mixed methods approach — combining both quantitative and qualitative research methods — was selected. However, the main focus of the study will be on quantitative data, with qualitative data serving to enhance and support the results from the quantitative data analysis.

The participants in this research study were three Grade 1, English L2 speaking classes from two schools, School A and School B. Learners' ages ranged from 5:10 (5 years and 10 months) to 8:2 (8 years and 2 months). School A had two Grade 1 classes, one of which was randomly assigned to be the experimental group while the other class functioned as the control group. A third Grade 1 class from School B served as an external control group. Of the two Grade 1 classes in School A, Grade 1A had 26 learners and Grade 1B had 25. The single Grade 1 class in School B had 18 learners. The total number of participants in the study was therefore 69 (N = 69). In Grade 1A the first language of 24 learners was Afrikaans and for 2 learners it was isiXhosa. In Grade 1B and in the external control group (School B) all learners were L1 Afrikaans speakers. The teachers involved in the study were the teachers of the three classes and were all Afrikaans speaking, female, Grade 1 teachers.

In order to test the feasibility of the study; to pre-test the research instruments; to try out the research techniques, instruments and methods; and to identify any practical problems that may have been overlooked in the planning process, a pilot study was conducted during the last term of the year preceding the main study. Based on the

results of the pilot study the researcher was able to modify and improve the main study by incorporating the information gained from the pilot study.

For the main study (refer 3.5) research data were collected by making use of three instruments. Firstly, the Peabody Picture Vocabulary Test IV (PPVT-IV), a diagnostic test, was used to determine the receptive vocabulary skills of the learners, and served as the data gathering instrument for the quantitative section of the research. The PPVT-IV was administered to all the learners (in the experimental and control groups) before the intervention, as a pre-test, and after the intervention as a post-test. Secondly, to gather qualitative data individual semi-structured interviews were conducted with the Experimental Group's teacher before and after the intervention. This was done in order to ascertain her teaching methods for vocabulary instruction. Thirdly, the researcher made use of classroom observations to complement the quantitative and qualitative data collected.

The main research intervention (refer 3.7) took place over a period of 18 weeks, during the second and third school terms. It consisted of interactive reading sessions, accompanied by interactive vocabulary instruction for the Experimental Group. The reading sessions lasted for about 30 minutes each and were done twice a week. The first two reading sessions were done by the researcher and thereafter by the Experimental Group's class teacher.

The data analysis process was divided into two parts, based on the fact that both quantitative and qualitative data were collected. The Statistical Package for Social Science (SPSS), Version 23, was used to perform the quantitative data analysis on the subjects' pre- and post- PPVT-IV scores. The data sets were examined in terms of within-group and between-groups comparisons. The qualitative data gathered from the semi-structured interviews and observation sheets were transcribed and analysed into general themes and tendencies. In Chapter Three a full description of the methodology used to conduct the present research study is provided and in Chapter Four the analysis of the data is presented in the form of tables and graphs and will be discussed in detail.

## **1.8 DEFINITION OF KEY TERMS**

Different researchers may interpret concepts and terms differently depending on the focus of their studies. In order to avoid ambiguity and for the sake of clarity the

following section will endeavor to define the key terms according to their use in the present study.

This study investigates whether vocabulary acquisition will be enhanced by interactive storybook reading. *Acquisition* is taken to mean the process whereby a learner takes in linguistic information and internalizes it. In the context of this study, the term *storybook reading* is used to indicate any reading activity in which an adult (the teacher) reads aloud to children (the learners). Similarly, in the context of this study, *interactive* storybook reading means that learners have the opportunity to actively participate and respond during the storybook reading session. In essence the teacher needs to create a conversation between the text, the learners and the teacher (Roberts, 2008). The teacher can do this by asking questions, making comments, giving instructions, labelling and encouraging learners to contribute or to retell the story. This type of interaction needs to take place before, during and after the storybook reading session (Beck & McKeown, 2007).

In addition, Research Question 1 refers to explicit vocabulary instruction – an approach in which information about the meaning of words are given to the learners directly (Stahl & Nagy, 2006) and includes strategies like explicitly relating words to familiar concepts, multiple exposures to new words, providing opportunities for learners to use the word and building on prior knowledge (Nagy & Herman, 1985).

## **1.9 OUTLINE OF CHAPTERS**

The dissertation is organized into five chapters which are subdivided as follows:

Chapter 1 introduces and formulates the main problem, presents the significance of the study and briefly describes the research design.

Chapter 2 contains a review of the related literature and research studies and provides a background for the study.

Chapter 3 outlines the methodology and research design used in order to achieve the aims and objectives of the study. In addition, it details the steps in the data gathering and analysis processes.

Chapter 4 presents the results of the study which are then analysed and interpreted with reference to insights gained from the literature review.

Chapter 5 briefly summarises the study, highlights the main findings, outlines the limitations and gives recommendations for future research.

## **1.10 CONCLUSION**

Chapter One presented a brief historical background to the current study. The overview identified some underlying theoretical frameworks relevant to the field of Applied Linguistics which guided the study. These theoretical frameworks served as context for the discussion of the research problem, purpose and research questions of the current study. Chapter Two will present a more detailed literature review of the body of knowledge and the resulting theoretical frameworks which continue to evolve as researchers strive to develop the best strategies for effective L2 teaching and learning.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This chapter contains an overview of some of the extensive research that has been done in the field of Applied Linguistics during the last twenty years. Within this field the study focuses on the acquisition of second language, and more specifically on vocabulary development and teaching pedagogy, with specific reference to the interaction between vocabulary, literacy, reading and listening.

English is a global language and a certain level of English proficiency is needed to access education, the business world, the labor market and for social interaction (Spaull, 2012; Taylor & Coetzee, 2013). In large parts of Africa and East Asia and for the Spanish speaking people in America and the immigrants in Europe this means learning a second language. In South Africa the 2011 census estimated that only about 23% of South Africans speak Afrikaans or English as their first language (Statistics South Africa, 2012). In other words, a vast number of people, in South Africa and across the world, have to or wish to acquire English as a L2. The South African Language in Education policy will be discussed at the end of this chapter (refer 2.9). However, the reality of the situation in South Africa is that from Grade 4 onwards the majority, approximately 80% of South African learners, are educated in their second language (Howie, Venter & Van Staden, 2008). Accordingly, research into how best to teach and develop a second language is essential and should be a relevant aspect of education planning (Taylor & Coetzee, 2013).

However, research done in the field of second language acquisition has certain limitations and difficulties because of the number of variables that can potentially interfere with the research outcomes (Hulstijn, 1997). In reality learners all have unique second language (L2) learning experiences. Hulstijn (1997:131) explains that 'one of the most difficult methodological challenges is to keep all such variables constant. This is almost impossible in 'normal' classrooms with real L2 learners. It comes as no surprise, therefore, that the outcomes of studies conducted in natural learning environments, including classrooms, often form the object of considerable disagreement.' Taylor and Coetzee (2013) make the noteworthy observation that in South Africa it would be invalid, for example, to compare L2 learners from schools

who use English as the language of learning and teaching (LoLT) from Grade 1 with L2 learners from schools who change from First Language (L2) to English in Grade 4.

It is important therefore that, when doing research in the field of L2 vocabulary acquisition, all efforts are made to control intervening and confounding variables.

## **2.2 WHY VOCABULARY?**

The knowledge of words, or vocabulary knowledge, is regarded as one of the essential elements of language development and proficiency in both the L1 and the L2. Studies have demonstrated that there is a relationship between vocabulary, reading comprehension and reading competence (Beck *et al.*, 1982). In the L2 vocabulary knowledge is correlated to oral proficiency, writing ability and listening and reading comprehension (Cunningham & Stanovich, 2001). The National Reading Panel (2000) states that learners cannot understand a text without knowing what most of the words mean and that word meaning is critical to the reading process.

Stahl and Nagy (2006:5) write most eloquently about the power of vocabulary:

*A person who knows more words can speak, and even think, more precisely about the world. A person who knows the terms scarlet and azure and indigo can think about colors in a different way than a person who is limited to red and blue...words divide the world; the more words we have, the more complex ways we can think about the world.*

As will be detailed later (refer 2.9.2), in South Africa the low level of English L2 proficiency of in the Foundation Phase is worrying. South African statistics (Statistics South Africa, 2012) resemble research results by Lesaux *et al.* (2010) displaying a low level of literacy among adolescents in America, where learners from lower income groups and urban schools show particularly low levels of literacy. However, it is especially learners from minority language groups, who have fewer learning opportunities that struggle with reading comprehension. A limited vocabulary was identified as one of the factors that negatively influenced reading comprehension and literacy in these learners (Lesaux *et al.*, 2010). In fact, learners' early vocabulary knowledge predicts later reading accomplishment (McKeown & Beck, 2011). The results of the study by Stæhr (2008:140) into the relationship between vocabulary

size and language proficiency in the L2 revealed a strong correlation between vocabulary size and language proficiency; emphasizing the importance of vocabulary for language proficiency. In fact, Stæhr (2008) maintains that receptive vocabulary size is the most important determining factor for reading success in the L2. In addition, Grade 1 oral vocabulary was found by Cunningham and Stanovich (1997) to be a significant predictor of reading comprehension ten years later. An insufficient vocabulary impedes successful reading comprehension as it is not possible to read with comprehension if the meaning of the words are not understood. In reality, reading comprehension and vocabulary have a reciprocal relationship. The more words learners know, the easier it is for them to read with comprehension and the more willing they are to read and the more they read the larger their vocabulary becomes (Stæhr, 2008). Furthermore, Stæhr (2008:150) found that vocabulary size does not only correlate positively with reading comprehension, but also with the other language skills of listening comprehension and writing. Vocabulary is an essential element for literacy development and literacy 'determines educational success' (Pretorius & Mokhwesana, 2009:55).

It is therefore fair to say that vocabulary is important, not only for literacy but for overall academic performance. Researchers, teachers and linguists agree that some form of vocabulary curriculum should be developed to enlarge L2 learners' vocabulary (McKeown & Beck, 2011). This teaching and learning of vocabulary should be one of the core components of reading lessons (McKeown & Beck, 2011) and begin in early childhood—a position supported by Ntuli and Pretorius (2005), who recommend that vocabulary instruction should preferably begin as early as preschool. Many L2 learners see L2 vocabulary development as a crucial part of L2 acquisition and believe that one of the reasons why they struggle to master the L2 stems from their lack of vocabulary (Jeon & Shin, 2011). Unfortunately, vocabulary building is an area of L2 teaching that is often neglected, partly because teachers seem uncertain how to incorporate this into the L2 teaching curriculum (Hulstijn, 2001:258). Pretorius *et al.* (2016:12) suggest that many teachers approach vocabulary development in a 'lackadaisical manner' because they feel overwhelmed and lack the knowledge to help learners successfully build their vocabulary. Learning a list of words and their definitions by rote does not effectively increase lexicon and the idea seems outdated, especially when viewed from the perspective

of the communicative approach to language teaching. Pretorius (2002:191) writes that South African schools still rely on rote learning and oral modes of teaching. Although linguists agree that vocabulary teaching should take place, exactly how it should take place is still contentious and generally language classrooms have very little systematic and explicit vocabulary teaching as part of their curriculum (Lesaux *et al.*, 2010). And so in many L2 courses, very little attention is given to vocabulary development and learners are often expected to enlarge their vocabulary themselves. But, as will be discussed in the next section, vocabulary knowledge is complex and multidimensional and learners need to know not only the meaning, but also the grammatical use, properties and functions of the words they learn. Aspects that are often difficult to learn without guidance.

### **2.2.1 Breadth and depth of vocabulary**

In order to research vocabulary acquisition it is, firstly, necessary to define what is meant by vocabulary and what it means to know a word. Vocabulary refers to the words we must know in order to communicate successfully. Without this knowledge it is neither possible to communicate effectively nor to comprehend what is being read. Word knowledge is however, multidimensional and different researchers have come up with different theories to try and explain the complex relationship between these facets (Wilsenach, 2015).

One of the first vocabulary knowledge frameworks was constructed by Richards (1976). Richards identified seven aspects of word knowledge (syntactic, behaviour, associations, semantic value, different meanings, underlying form and derivations). Since 1976 numerous articles have been written on the subject. Nation (1990) distinguished eight types of word knowledge in his framework and Qian (2002) took the earlier frameworks and proposed that vocabulary knowledge consists of four dimensions (vocabulary size, depth of vocabulary, lexical organization and receptive-productive knowledge).

When reviewing these different frameworks it becomes clear that vocabulary knowledge should at least have two dimensions: breadth or size and depth or quality (Meara, 1996). Breadth of vocabulary knowledge can be defined as the number of words a person knows, even if the person only has a superficial knowledge of the word (Milton, 2009). Depth of knowledge refers to what a person knows about these

words, or how well the person knows the word, where such knowledge might include elements of spelling, pronunciation, meaning, register, frequency, syntax and pronunciation (Milton, 2009). This means that there is both a quantitative and qualitative element to vocabulary acquisition. On the one hand the question is ‘How many words does the person know?’—the quantitative aspect—and, on the other hand, the question is ‘What do the person know about these words?’—the qualitative aspect. In essence, this amounts to the breadth and depth of an individual’s vocabulary.

As a matter of interest, research done by Qian (2002) into the relationship between the breadth of vocabulary and reading comprehension indicates a relatively high correlation. This was confirmed in 2003 by Jun, who found that the correlation between vocabulary breadth and reading comprehension is higher than vocabulary depth and reading comprehension. The implication of these findings is that, in the school situation where reading comprehension is vital, the focus needs to be on developing a broad and expansive vocabulary in L2 learners. Some researchers, like Milton (2009), question the usefulness of depth as a dimension of vocabulary.

### **2.2.2 Receptive and productive vocabulary**

While breadth and depth of vocabulary are important indicators of a learner’s vocabulary it does not fully reflect the complex nature of vocabulary knowledge. Vocabulary knowledge is more than simply knowing the meaning and form of a word. Therefore, an additional distinction in the definition of word knowledge has been made between receptive (passive) and productive (active) vocabulary (Nation, 2001). Receptive vocabulary knowledge refers to the ability to understand and recognize a word when reading or listening (receptive mode) while productive vocabulary knowledge is the knowledge to produce a word when writing or speaking (productive mode) (Crow, 1986). This concept was further developed by Laufer and Goldstein (2004) who describe receptive knowledge as retrieval of the word form and productive knowledge as retrieval of the word meaning. This distinction becomes blurred because Milton (2009) argues that ‘good passive skills often require the reader or the listener to actively anticipate the words that will occur’ (Milton 2009:13). In other words, while listening and reading, the learner also demonstrates productive word knowledge. Nation (2001) argues that the division of vocabulary knowledge into

binary categories like breadth and depth or receptive and productive might be too simplistic and adds that knowing a word involves various aspects of knowledge of form, knowledge of meaning and knowledge of the use of the word (refer Table 1).

Table 1: What is involved in knowing a word? (Nation, 2001:27)

Form	Spoken	Receptive	What does the word sound like?
		Productive	How is the word pronounced?
	Written	Receptive	What does the word look like?
		Productive	How is the word written and spelled?
	Word parts	Receptive	What parts are recognizable in the word?
		Productive	What word parts are needed to express this meaning?
Meaning	Form and meaning	Receptive	What meaning does the word form signal?
		Productive	What word form can be used to express this meaning?
	Concepts and referents	Receptive	What is included in the concept?
		Productive	What items can the concept refer to?
	Associations	Receptive	What other words does this make us think of?
		Productive	What other words can we use instead of this one?
Use	Grammatical functions	Receptive	In what patterns does this word occur?
		Productive	In what patterns must we use this word?
	Collocations	Receptive	What words or types of words occur with this one?
		Productive	What words or type of words must we use with this one?
	Constraints on use (register, frequency)	Receptive	Where, when and how often would we expect to meet this word?
		Productive	Where, when and how often can we use this word?

For Nation (2001) each of the three categories (form, meaning and use) include different aspects of receptivity or productivity. Each category can be further subdivided so that for Nation (2001), knowledge of the form of a word includes both knowing what a word looks like in the written form and what it sounds like when spoken (Nation, 2001:27). Nation (2001) states that learners need to know both the written and spoken form of a word.

The relationship between receptive and productive vocabulary is clearly complex and there seems to be a difficulty hierarchy between the two. Melka (1997) claims that productive knowledge is more advanced and often acquired later than receptive knowledge. Milton (2009) agrees that receptive knowledge precedes productive knowledge and adds that receptive vocabulary size is larger than productive vocabulary size as people often have words they understand but, for various reasons do not use when they speak or write. Tests like the Computer Adaptive Test of Size and Strength (CATSS), a computerized vocabulary test, developed by Laufer and Goldstein (2004), as well as research by Laufer (1998) and Laufer and Paribakht (1998) confirm that receptive vocabulary is acquired first, is larger than productive vocabulary and is a less advanced degree of vocabulary knowledge (Laufer & Goldstein, 2004). Laufer and Goldstein (2004:408) continue that: 'if active knowledge is more difficult to achieve than passive knowledge, and if recall is more difficult than recognition, then the most advanced degree of knowledge is reflected in active recall and the least advanced knowledge is passive recognition.' Additionally, it has been suggested that to develop the productive knowledge needed for effective communication a speaker needs a large receptive vocabulary, probably made up of thousands of words (Milton, 2009; Wilsenach, 2015). However, in research by Stæhr (2008:139) into the English (L2) language skills of 88 Danish learners between 15 and 16 years the results reveal that if learners have a minimum 2000 vocabulary level they could perform adequately in the listening, reading and writing tests.

Another controversy surrounding the receptive-productive notion of vocabulary is that there seems to be 'no consensus as to whether this distinction is dichotomous of whether it constitutes a continuum' (Laufer & Goldstein, 2004:401).

In summary, vocabulary knowledge is complex in nature and 'knowing' a word entails several different dimensions, including receptive and productive knowledge. This

has implications for both vocabulary teaching and learning. For the current study the dimensions of receptive and productive knowledge are relevant because, even though the reading sessions used in the intervention will be interactive and learners will be encouraged to participate, the vocabulary acquired from listening to stories will be predominantly receptive. In addition, the learners in this study are still young and (as stated earlier) since receptive vocabulary develops before productive vocabulary, it can be expected that in Grade 1 learners will acquire mainly receptive vocabulary. Consequently, the researcher made use of the PPVT-IV vocabulary test to assess the receptive vocabulary of the Grade 1 learners.

### **2.3 MEASURING VOCABULARY KNOWLEDGE**

As discussed in the preceding section vocabulary knowledge is complex and encompasses aspects like breadth and depth and receptive and productive knowledge. Accordingly, when assessing vocabulary knowledge these aspects must be taken into consideration.

The National Reading Panel (2000) found that studies of vocabulary instruction and acquisition use different assessment instruments to measure learners' vocabulary knowledge and this in turn leads to different results. Schmitt (2010:188) agrees, noting that, 'different ways of counting lexical items will lead to vastly different results, and a persistent problem in lexical studies is that size figures are reported, but without a clear indication of how they were derived.' Writers, like Van Zeeland and Schmitt (2013) question the effectiveness of vocabulary tests used in research studies by Elley (1989) and Justice, Meier and Walpole (2005) arguing that these assessments are not sensitive enough since they generally measure only whether or not learners know the definition of the words (Van Zeeland & Schmitt, 2013). In addition, Hughes (2003:2) asserts that language tests often lack reliability as 'they fail to measure accurately whatever it is that they are intended to measure.' The National Reading Panel therefore suggested that 'using more than a single measure of vocabulary is critical for sound evaluation;' continuing that vocabulary measures should assess both receptive and productive aspects of vocabulary knowledge as these different types of assessments tasks assess learners' vocabulary knowledge differently (National Reading Panel, 2000:4-26).

Vocabulary tests can be broadly divided into two categories: firstly, standardised tests which are prepared by a team of professionals and are usually highly reliable and valid. Secondly, non-standardised tests prepared by an individual teacher according to what s/he wants to cover and test in class; this means that the tests might not be as reliable and valid as standardised tests (Read, 2000). Standardised vocabulary tests are regularly used in research and include the Peabody Picture Vocabulary Test (PPVT), the Expressive Vocabulary Test (EVT), the Receptive One Word Picture Vocabulary Test, and the Expressive One Word Picture Vocabulary Test to name a few. The importance of knowing a learner's receptive or productive vocabulary size is stressed by Webb (2008) arguing that this knowledge enables teachers to assess whether learners understand the words and text and are able to write about a topic.

### **2.3.1 Standardised vocabulary tests**

The PPVT is a standardised test for receptive vocabulary knowledge in which the examiner says a word, the learner is shown four pictures and then selects the correct option (Dunn & Dunn, 2007). The PPVT-IV was used in this research and will be discussed in detail in Chapter 3.

The Vocabulary Levels Test (VLT) designed by Nation (1990) in the 1980s is a tool to measure written receptive vocabulary knowledge. The VLT is called a 'Levels Test' because it assesses learners' knowledge of four frequency levels of English word families: 2,000, 3,000, 5,000 and 10,000 (Nation, 1990). The test assumes that more frequent words are learned before less frequent words (Schmitt, 1994). During the test learners have to choose which of the six words match the three meanings provided, in other words learners are asked to identify the word form rather than the meaning or definition of the word (Schmitt, 2010). The advantage of this test is that it is possible to determine how many words a learner knows at each level (Schmitt, 1994). The VLT was originally designed as a diagnostic tool for teachers (Nation, 1990) but, is now widely used as an instrument to estimate vocabulary breadth of L2 learners (Laufer & Paribakht, 1998; Schmitt, 2010). However, this is not the intended use of the test and Schmitt (2010:198) argues that the VLT is not really suited to provide a learner's overall vocabulary size but, 'is better used to supply a profile of a

learner's vocabulary, which is particularly useful for placement and diagnostic purposes.'

Schmitt (1994:10) states that, 'until recently, almost all vocabulary tests measured vocabulary size.' Furthermore, Nation (1990) points out that in order to know a word one needs to know more than its meaning and subsequently linguists and researchers began developing standardized depth of knowledge tests.

In the Lexical Frequency Profile (LFP) test; also called the controlled active vocabulary test, (Laufer & Nation, 1999) productive vocabulary is assessed by analyzing both written and spoken discourse produced by learners; vocabulary is classified into frequent and infrequent words (Meara & Fitzpatrick, 2000). The LFP was used in the research by Laufer (1998) and Laufer and Paribakht (1998).

Another type of standardized test is the commercial proficiency test called the Test of English as a Foreign Language (TOEFL) which measures the English language ability of learners whose L1 is not English. These types of tests are used to determine a learner's vocabulary size in order to get an indication of the learner's overall English language proficiency. Based on the results learners' may or may not get admission to many English speaking universities (Schmitt, 1994).

As the name suggests the Productive Vocabulary Levels Test (PVLVT) by Laufer and Nation (1999) measures productive vocabulary. Learners are given a sentence where only the first few letters of a word are supplied and they have to complete the word.

Meara and Fitzpatrick (2000) maintain that both the Productive Vocabulary Levels Test (PVLVT) and the Lexical Frequency Profile Test (LFP) are problematic. They state that the PVLVT is only effective for a relatively small vocabulary and doubt if the LFP is able to encourage learners to demonstrate their total vocabulary knowledge. According to Webb (2008), a weakness of the VLT is that learners have a 17% chance of guessing the correct answer and consequently the result of this test will be higher than the results of the PVLVT. Meara and Fitzpatrick (2000) therefore introduced the Lex30 vocabulary test in 2000. The Lex30 is a word association test which is used to assess productive vocabulary and is similar to the LFP as there is no predetermined target words learners have to produce (Meara & Fitzpatrick, 2000).

Learners are provided with a list of stimulus words and are then required to produce four words they associate with each stimulus (Meara & Fitzpatrick, 2000).

With the development of information and several computer technology computer adaptive tests were developed, offering a more cost effective and time efficient way of collecting data than the traditional paper and pencil tests (Hughes, 2003). The Computer Adaptive Test of Size and Strength (CATSS) is a standardized computer vocabulary test developed by Laufer and Goldstein in 2004 (Laufer & Goldstein, 2004). The test aims to assess both breadth and depth of vocabulary and is based on the assumption that there are four degrees of word knowledge that can be tested by active recall, passive recall, active recognition and passive recognition (Laufer & Goldstein, 2004:406).

### **2.3.2 Non-standardised vocabulary tests**

In addition to standardised tests, teachers need to be able to set their own, non-standardised class tests on a day to day or week to week basis. In order to test learners' class achievement the words in the vocabulary test must be selected from the words taught in class (Schmitt, 1994). However, as indicated earlier, vocabulary knowledge is made up of different aspects and when setting tests teachers not only have to decide on which words to include, but also what the purpose of the test is: whether they want to assess the size of a learner's vocabulary (breadth of knowledge) or how well the learner knows the words (depth of vocabulary) and, if the vocabulary will be tested receptively or productively (Schmitt, 1994). These decisions impact not only on the format of the vocabulary test, but more importantly on the results obtained from the test. Researchers like Melka (1997) and Nation (2001) stress the importance of using an appropriate instrument when measuring learners' vocabulary and, as different learners may have different strengths and abilities, Schmitt (1994:11) suggests that it might be better to combine various test formats to ensure reliable results.

According to Hughes (2003:5) assessments can be either formative or summative. In formative tests teachers check learners' progress in order to modify further teaching and in summative tests learners' overall achievements and knowledge are assessed. It is therefore important to know the purpose of a test as this will influence the kind of test used (Hughes, 2003). The purposes of a vocabulary test are,

amongst others, to diagnose learners' strengths and weaknesses, to measure vocabulary knowledge, to identify any gaps in vocabulary and to establish if they have learned the vocabulary they have been taught (Schmitt, 1994). Also, vocabulary assessments enable teachers to establish whether learners understand the work covered in the classroom: the results of the tests can therefore inform the teachers L2 teaching practices and focus; resulting in better vocabulary instruction.

The impact a test has on learning and teaching is referred to as the backwash effect and can be either positive or negative. Hughes (2003:78) explains that learners are encouraged to study whenever a test is written and that this is a positive washback effect. Negative washback takes place when all the work in the classroom focuses on the demands of the test. For example, if a test consists mainly of multiple choice questions, the teachers practise only similar exercises to prepare learners for the test. Teachers must keep this in mind and ensure that tests do not negatively influence their teaching practices.

Furthermore, Read (2000:7) explains that there are two different views on vocabulary testing in the classroom. One view holds that vocabulary should always be assessed holistically and in context, as well as in conjunction with other elements of language knowledge. The other view maintains that vocabulary can be assessed in isolation, without context, as a list of independent items.

When setting a test teachers must consider the length of the test; generally the longer a test the more reliable it is deemed (Schmitt, 1994). However, teachers must also take into account the fact that learners may become fatigued if a test is too long and this can have a detrimental effect on results. Nation (2001) recommends a minimum of 30 items for a vocabulary test, but ideally, a test should be set in such a way that the majority of learners can complete the test in the allotted time period (Schmitt, 1994). A fair vocabulary test is regarded as a test in which there are no misleading questions which trick learners and no clues to assist learners, consequently learners who know a word is able to answer the question and learners who do not know a word is unable to guess the answer correctly (Schmitt, 1994).

Vocabulary testing is as complex as vocabulary knowledge and teachers must take the abovementioned factors into account while striving to assess learners' vocabulary in a fair, varied and meaningful way.

## **2.4 VOCABULARY ACQUISITION**

Learning and teaching strategies for vocabulary acquisition in the L1 have been widely researched and studied. This body of research (Beck *et al.*, 1982; Beck *et al.*, 2002; Pretorius & Spaul, 2016:1451) informs the beliefs and theories about L2 vocabulary development as there is evidence that because of similarities in human cognitive functioning the same factors pertaining to vocabulary, literacy and reading development in the L1 can be applied to the L2.

Research has shown that vocabulary can be learned in two main ways—by incidental/implicit vocabulary learning or by intentional/explicit learning (Hulstijn, 1997; Nation, 2001; Pretorius *et al.*, 2016). The terms ‘incidental’ and ‘explicit’ learning are also used in the fields of pedagogy, psychology, linguistics and applied linguistics and this range of fields generates a certain amount of ambiguity and confusion as to what these terms, particularly incidental learning, refer to. Hulstijn (2003:357) states that incidental learning ‘has often been rather loosely interpreted in common terms not firmly rooted in a particular theory.’ It is therefore necessary to give some clarification regarding the use of these terms in vocabulary research in general and in the present study in particular.

### **2.4.1 Incidental versus explicit vocabulary acquisition**

Researchers like Hulstijn (2001) and Nation (2001) maintain that L2 vocabulary is acquired not only explicitly, but also incidentally. However, a closer look at the research and articles about vocabulary acquisition bring to light the fact that different writers and researchers mean different things when they use the term ‘incidental learning’, leading to controversy and uncertainty surrounding the term (Hulstijn, 2003).

According to Van Zeeland and Schmitt (2013), incidental learning occurs when learners gain some elements of the L2 (like vocabulary) without focusing explicitly on the learning process. An example of this type of learning was demonstrated in the research by Krashen (1989), where incidental learning was used to test vocabulary acquisition as a by-product of reading comprehension. The participants did not focus on the unknown words, but acquired them subconsciously, in other words incidentally.

The distinction between incidental and explicit vocabulary learning thus appears to revolve around the learners' awareness of learning. Incidental learning, as the name implies, is implicit and takes place when learning is not the focus, but a byproduct of other activities. Thus, incidental learning is 'learning without an awareness of learning' (Schmidt, 1994:20). Explicit learning, on the other hand, is intentional and learning takes place deliberately and with awareness (Hulstijn, 2001; Pretorius *et al.*, 2016). In other words, the distinction to be made is whether the words that learners acquire are a by-product of another activity or the main focus of learning at the point of learning (Schmidt, 1994; Hulstijn, 1997).

The misperceptions regarding the use of the term incidental learning is demonstrated in the study by Brown, Waring and Donkaewbua (2008:141), entitled *Incidental vocabulary acquisition from reading, reading-while-listening, and listening to stories*. The researchers stated that 'the subjects were initially told they would take part in a vocabulary-learning strategies programme' (Brown *et al.*, 2008:141). This indicates that the subjects' attention was drawn to the fact that they were participating in a study to test vocabulary learning, even though the title of the research refers to 'incidental vocabulary acquisition.' This seems to be contrary to the notion that incidental learning takes place when a learner learns one thing while aiming and expecting to learn another.

In the present study the main focus is on explicit vocabulary learning and the term 'incidental learning' is used only in connection with vocabulary learning and it is used specifically to indicate the learning of vocabulary as a result of any intervention not specifically designed to teach vocabulary (Hulstijn, 2001). Hulstijn (2001) maintains that this is the accepted use for the term in the field of second and foreign language pedagogy. Hulstijn further argues that incidental and intentional vocabulary learning should be regarded as complementary and mutually beneficial, and that both contribute to the learning taking place. In fact, 'the labels incidental and intentional learning no longer reflect a major theoretical distinction' (Hulstijn, 2001:275).

### **2.4.2 Storybook reading**

Reading is a powerful vehicle for building oral language, early literacy skills and vocabulary (Biemiller & Boote, 2006). However, while older and more proficient readers can read to acquire vocabulary younger learners are often limited in their

independent reading to simple and familiar texts (Stanovich, 1986; Beck & McKeown, 2007). These texts are unlikely to expose learners to new vocabulary (Beck & McKeown, 2007). To compensate for young learners' lack of reading ability reading storybooks aloud (sometimes also referred to as 'read-alouds') to learners is recommended (Beck & McKeown, 2007). In this way learners are exposed to unfamiliar Tier 2 words – “the high frequency words of mature language users” and vocabulary development is facilitated (Beck *et al.*, 2002:8).

In the context of the current study the term *storybook reading* is used to indicate any reading activity in which an adult reads aloud to children. Storybook reading will be discussed in more detail in Sections 2.5 and 2.6 as it is a word-building vehicle used in both incidental and explicit vocabulary acquisition.

## **2.5 INCIDENTAL VOCABULARY ACQUISITION**

The communicative approach to language teaching (refer 1.2), popular in the 1970s strongly emphasised the development of meaningful communication and naturally underscored incidental learning (Zimmerman, 1997). Influenced by the communicative approach the main focus of several studies in the field of L2 vocabulary learning which were carried out in the 1990s and early 2000s (Read, 2004) was incidental vocabulary acquisition through reading interventions and extensive reading programmes (Van Zeeland & Schmitt, 2013). Initially the hypothesis, as set out by Krashen in 1989, was that reading is one of the ways in which new words can be learned and that reading in the L2, with no additional input, can lead to incidental vocabulary learning. Reading can take place either as self-reading (where learners read to themselves) or by being read to by another person, e.g. storybook reading by a teacher. Krashen (1989) alleges that vocabulary is subconsciously learned when reading; even though learners do not focus on the unknown words, but on the meaning of the text, they nevertheless absorb the meaning of the words. This view was popular during the 1980s when applied linguists moved away from the grammar-based approach to language teaching and the communicative approach became prevalent in the field of L2 teaching (Read, 2004). Language was no longer seen as a static system that could be learned, but as fluid and, in teaching, communication and communicative competencies were emphasized. As far as vocabulary was concerned, the perception was that 'L2

vocabulary acquisition would largely take care of itself' (Read, 2004:147). In other words, incidental vocabulary acquisition would take place automatically and unconsciously when learners were exposed to the L2 and, as a result, very little attention was given to explicit vocabulary instruction in the classroom (Read, 2004) - a questionable practice since vocabulary is a key component of overall academic performance (Beck *et al.*, 1982; Pretorius *et al.*, 2016).

### **2.5.1 Incidental vocabulary acquisition through self-reading**

Studies (Paribakht & Wesche, 1997; Brown *et al.*, 2008; Vidal, 2011) confirmed Krashen's (1989) hypothesis that L2 vocabulary learning takes place through self-reading for comprehension. However, the research studies confirming incidental vocabulary acquisition also suggest that the process is time-consuming and unpredictable, which raises questions about the effectiveness of this approach for L2 learners (Paribakht & Wesche, 1997; Zimmerman, 1997). In addition, the Matthew effect (discussed in 2.6) states that learners with a low vocabulary are not always capable of learning new vocabulary through reading (Stanovich, 1986). It must also be remembered that the main purpose of an author is to tell a story and not to explain the meaning of words. It then follows that simply by encountering an unfamiliar word in a book or story does not mean that the learner will automatically understand its meaning.

Moreover, Beck *et al.* (2002) indicate that certain conditions must be met in order for vocabulary to be learned through self-reading and context. Firstly, the learner must have adequate decoding skills so that the words can actually be read. Secondly, the learner must realize that the word is unknown, and, thirdly, the learner has to be able to figure out the meaning of the word from the context. Not all readers, especially young L2 readers, have these abilities, leading to these learners simply ignoring unfamiliar words. Paribakht and Wesche (1997) maintain that L2 readers ignore most unfamiliar words and pay attention only to those words they specifically need in order to understand the text. Clearly, if ignoring words does take place, it will limit the amount of new words being learned and have a negative impact on the success of vocabulary learning through incidental reading. Furthermore, self-reading is not a viable option for younger learners as pre-school and Grade 1 learners generally cannot read. The graded readers used by lower grades are normally short and

simple decodable or familiar texts which contain mainly known or common words. These texts are not effective in increasing vocabulary but act only to cement existing vocabulary and consequently exposure to new words is unlikely to come from these texts (Beck & McKeown, 2007). In order to broaden vocabulary readers with slightly more advanced and complex words would have to be used - texts that Grade 1 learners would not be able to read themselves.

Nevertheless, incidental vocabulary acquisition in the L2 can take place not only through written input, but also through oral input (Hulstijn, 2001). It therefore seems that, although it has been established that incidental vocabulary acquisition takes place during self-reading, this vehicle is better suited for older and more proficient learners (Stanovich, 1986; Beck & McKeown, 2007). In order to compensate for this, exposing younger learners to book language and building their oral vocabulary the strategy of reading storybooks aloud to younger learners can be employed.

### **2.5.2 Incidental vocabulary acquisition through storybook reading**

One of the first studies into L2 vocabulary acquisition by means of oral input in the form of storybook reading (also called read-alouds) was conducted by Elley in 1989. English storybooks were read to six groups of 8 year old Fiji English learners to measure whether oral storybook reading leads to vocabulary acquisition in the L2. Learners listened to the same story, with pictures, being read to them three times over a period of one week. The three groups of 8 year olds who received no teacher input or explanation showed a 15% increase in vocabulary. The research was significant because it demonstrates that vocabulary learning took place, indicating that learners acquire vocabulary from oral input in the form of storybook reading (Elley, 1989).

Ellis (1999:58) expressed the conviction that 'most vocabulary is learned incidentally, much of it through oral input.' Nation (2001:117) confirms this, stating that 'there is a growing body of evidence that shows . . . that learners can pick up new vocabulary as they are being read to.' Teale (2003) quotes research studies done over the last 50 years illustrating a positive correlation between being read to and learners' later reading achievement. Beck *et al.* (2002:2) assert studies indicate that 'reading aloud seemed like a natural vehicle for developing ways to enhance vocabulary.' In addition, Biemiller and Boote (2006) maintain that storybook reading is an acceptable

way to develop L2 vocabulary in young learners. Roberts (2008) agrees, affirming that reading aloud to learners is important in increasing vocabulary and, thereby, promoting the learner's conceptual knowledge and, ultimately, language proficiency. The theory and related underlying assumptions used in Roberts' (2008) research with preschool learners and home storybook reading in primary and/or second language were reading aloud to preschool learners will develop their vocabulary, language ability and literacy competencies. This study demonstrates not only that it is possible for learners to acquire L2 vocabulary through storybook reading but that it is also possible for very young, preschool learners to do so (Roberts, 2008).

McKeown and Beck (2011) offer support for the development of incidental vocabulary learning but conclude that, although reading storybooks to learners enhances their vocabulary, the effect is minimal after only one passive encounter with the text. Vocabulary gains after a single, unenhanced reading of a storybook were negligible and unimpressive: 3% and 15% in Elley (1989), no gain in Justice *et al.* (2005), and 'little gain' in Biemiller and Boote (2006). Brown *et al.* (2008) compared the vocabulary acquisition from self-reading, reading-while-listening and storybook read-alouds, and found that gains in vocabulary through listening alone were small, with the Japanese university students tested learning only 2% of the 28 target words. However, Van Zeeland and Schmitt (2013) contend that incidental vocabulary learning is very complex and suggest that the vocabulary tests used were not sensitive enough and that more learning may have taken place than was reported. Merely encountering an unfamiliar word in a book or story does not mean that the learner will automatically understand and remember its meaning. Elley (1989) and Penno *et al.* (2002) believe that stories need to be read more than once in order to enhance vocabulary learning; though Biemiller (2004) raises the concern that learners might become bored with the same story being read repeatedly.

Other researchers, such as Genesee, Lindholm-Leary, Saunders and Christian (2006), assert that the level of second language proficiency has an influence on the success of a reading programme. In research done by Robbins and Ehri (1994) 45 kindergarten learners, who were non-readers, listened to an adult reading a storybook to them. The storybook was read to them twice, two to four days apart. Afterwards learners had to complete a test measuring their knowledge of 22 words, half of which were unfamiliar, half of which appeared in the story. The learners

recognized more words from the story than words that had not been included in the story. This indicates that storybook reading is effective in building vocabulary if the text is read more than once. It was also found that gains in vocabulary were greater among learners with a larger starting vocabulary. These findings correspond with the views of Genesee *et al.* (2006) that initial language proficiency has an influence on the vocabulary gains during storybook reading.

In the context of this study, an important result from research by Elley (1989) referred to earlier, shows that, although the three groups of Fiji learners exposed to storybook reading improved their vocabulary by 15%, the remaining three groups - who not only received oral input, but also explanations and explicit instructions - showed vocabulary gains of 40%. In later studies done by Brown *et al.* (2008) and Vidal (2011) vocabulary learning from read-alouds was measured and it was found that, although learning did occur, vocabulary gains were bigger when the reading sessions were accompanied by teacher input.

It therefore becomes clear that although storybook reading is an important and relatively simple source of vocabulary learning, the relationship between reading aloud and learning vocabulary from the storybooks is more intricate and complicated than originally thought (Beck & McKeown, 2007). Although vocabulary acquisition is possible through incidental storybook reading, this type of input alone may not be the most effective way to either teach or learn L2 vocabulary. In fact Milton (2009), disputes the whole concept of incidental learning, maintaining that it is impossible for anyone to acquire vocabulary through incidental learning alone. This study will attempt to show that schools should not rely solely on incidental vocabulary learning, but instead need to actively contribute to increasing learners' vocabulary through explicit vocabulary instruction.

## **2.6 EXPLICIT VOCABULARY INSTRUCTION**

When Elley conducted the ground breaking research (refer 2.4.2) into vocabulary acquisition from multiple story readings accompanied by vocabulary enhancement (Elley, 1989; Penno *et al.*, 2002), it was found that storybook reading is a source of vocabulary learning and that, although incidental learning increases vocabulary, explicit vocabulary learning is more effective. Researchers and linguists then started investigating whether combining reading with interactive and explicit word instruction,

together with more traditional ways of teaching vocabulary, would make a difference in the rate and amount of vocabulary acquired. The assumption being that listening to stories would improve vocabulary, but listening to stories with explicit vocabulary instructions would lead to greater vocabulary gains.

During explicit vocabulary instruction the teacher engages in activities that focus the learners' attention on the words, as opposed to incidental vocabulary learning (refer 2.4.1) where the focus is elsewhere. Through the storybook reading experience the teacher would use various strategies to directly explain and teach word meaning (Sökmen, 1997). The various strategies that are effective for this type of teaching include providing learners with friendly definitions, synonyms and explanations of unknown words and interacting with learners during storybook reading (Elley, 1989; Penno *et al.*, 2002; Justice *et al.*, 2005; Biemiller & Boote, 2006). According to the National Reading Panel (2000) giving contextual information and providing multiple exposures to the words are also beneficial. This type of exposure will allow learners to move from simply memorizing dictionary definitions of words to a deeper understanding of these words and enable them to use the words more effectively (Schmitt, 1997).

### **2.6.1 L2 academic proficiency**

Cummins (2008:487) made the distinction between basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP). BICS refers to conversational fluency in a language, while CALP refers to learners' ability to understand and express academic concepts important for success in school (Cummins, 2008:487). According to Cummins (2008:488) educators often confuse BICS and CALP. The distinction is important as learners may have conversational fluency in the L2, leading teachers to believe that they are proficient in the language, when in fact they might not have the necessary academic language proficiency to cope with school work. This leads to academic difficulties for learners. In fact, Cummins (2000) postulates that while it takes approximately two to three years to develop BICS, CALP requires five to seven years to develop.

Learners do not usually learn the kind of academic language that is needed for school and academic success from being exposed to everyday English. Given that the vocabulary and language used in science, mathematics and social studies differ

from that used in everyday life, exposure to everyday English is not enough for success in school, particularly in the higher grades. In their study, Norris and Ortega (2000) found that focused English language instruction—English being the L2—designed to teach specific language aspects was five times more beneficial than mere exposure to the second language. This is another reason why storybook reading is emphasized in L2 vocabulary development; daily conversations often contain only everyday words and are a limited source of new word learning (Hayes & Ahrens, 1988). Texts used in storybook reading, on the other hand, expose learners to book language which typically contain descriptive language and new or unusual words (Beck *et al.*, 2002). In addition, adults regularly simplify their vocabulary choices when speaking with young children; this obviously does not contribute to vocabulary acquisition (Hayes & Ahrens, 1988).

The National Reading Panel (2000) concluded that although most vocabulary are learned indirectly, there are some words that must be taught directly. Reese, Thomas and Goldenberg (2005) claim that whereas exposure to English in the form of going to school with English speakers and watching English television programmes is beneficial, L2 learners need actual language and vocabulary instruction in order to obtain academic language proficiency.

### **2.6.2 Interactive storybook reading**

The research studies discussed in the section above (refer 2.5) argue that simply reading storybooks aloud to learners is not sufficient for accelerating oral vocabulary development. In order to enhance vocabulary and language development Dickinson and Smith (1994) maintain that the style of the storybook reading matters while Ard and Beverly (2004) contend that adult mediation is important. Beck and McKeown (2007) advocate interactive vocabulary teaching practices. In other words, the way in which storybooks are shared with learners are significant.

The practice of shared storybook reading was first introduced by Holdaway (1979) and led to the development of Big Books. Shared reading is an interactive reading practice where teachers read enlarged texts to learners. The text must be large enough for learners to be able to see the print clearly and teachers must guide and support learners during reading. In this way learners join in the reading process and learn about how print works and about reading strategies (Fountas & Pinnell, 1996).

In addition, when Big Books are used learners can see and follow the text and, as the teacher reads, the reading process is demonstrated to learners. This exposure to the printed text, in turn, assists with the recognition of high frequency sight words (Fountas & Pinnell, 1996). Favourite stories are read repeatedly and learners are encouraged to 'read' along on the parts they know.

Storybook reading is a highly socialized activity and creates an interactive context within which there is a conversation between the teacher, text and learners (Neuman, 1996; Teale, 2003; Roberts, 2008). Within the interactive context of storybook reading effective teachers engage learners through questioning, comments and retelling (Teale, 2003; Justice *et al.*, 2005). It is these interactive teaching practices where teachers stop reading and elaborate and explain words that facilitates word learning and which is significant to vocabulary growth (Dickinson & Smith, 1994; Neuman, 1996).

Fountas and Pinnell (2006:33) believe that the interactive practices teachers should focus on during storybook reading are the meaning 'within the text,' 'about the text,' and 'beyond the text'. Clay (1991:171) writes that when teachers read to students word meanings can be conveyed in discussion 'before, during, and after the story reading.' Before reading the story teachers can arouse learners' interest in the book and ask for predictions based on the cover page and title of the book; this draws on learners' background knowledge. During storybook reading teachers can ask questions to engage the learners and keep their attention. Encouraging learners to follow the words familiarizes learners with the conventions of print (e.g. print vs. pictures). It is important to give learners the opportunity to participate and respond. After-reading activities can include discussions, asking open-ended questions or giving learners the opportunity to give their opinions of the story. Follow up activities like drawing or colouring a picture, reinforces vocabulary and the story line. In order to increase vocabulary certain words should be selected before the reading and these words are then explicitly explained after the reading (Beck & McKeown, 2007). These educational practices form part of the basic activities of early learning literacy instruction (refer 2.8). Although these reading strategies are essential it is also important that they do not interfere with the learners' enjoyment of the reading experience. Storybook reading should foster in learners a positive attitude towards reading and a love for books.

### **2.6.3 Explicit vocabulary teaching strategies during storybook reading**

Once it was established that for effective vocabulary acquisition it is important to focus on interactive storybook reading (as opposed to implicit learning) the next question researchers tried to answer was how to best incorporate explicit vocabulary instruction within the interactive storybook reading context (Sökmen, 1997).

Biemiller and Boote (2006:45) contend that it is difficult for young learners to give attention to new words when listening to stories and even more difficult to ask for an explanation of a word in a group reading situation. Direct explanation of words, during the reading session however, draws attention to words and helps learners to construct word knowledge. In a study by Valdez-Menchaca and Whitehurst (1992, cited in Roberts, 2008) family care-givers (parents, family members or any one responsible for the daily care of the child) were supplied with high-quality storybooks and shown how to read to and interact with children. The results demonstrate the effectiveness of interactive storybook reading on the development of language. Research done by Brett, Rothlein and Hurley (1996) with groups of Grade 4 learners found that listening to stories with no explanation of the words did not result in increased vocabulary knowledge. However, their study provides further confirmation that reading aloud to learners, supplemented by explaining unfamiliar words, is an effective way to teach vocabulary. Roberts and Neal (2004) supply additional evidence that young children acquire L2 vocabulary from storybook reading combined with interactive vocabulary instruction.

In 2010 Lesaux *et al.* investigated how to most effectively teach an academic vocabulary development programme focused on encouraging reading comprehension and increase vocabulary. The research was done in mainstream middle school classrooms with a high percentage of language minority learners. The secondary aim of the research was to investigate how to implement the programmes in schools. Results point out that the intervention led to significant improvements in various aspects of the learners' English vocabulary, including the meaning of taught words and words in unknown texts, and morphological awareness. These improvements were found in both language minority learners and L1 English speakers. Lesaux *et al.* (2010) argue that the results demonstrated that text-based vocabulary teaching is an effective way to improve early adolescence vocabulary

and reading comprehension. However, they point out that the appropriate choice of texts is essential for the success of this type of programme, learners need to have an interest in the story and a degree of involvement.

In 2001, Beck and McKeown developed a reading technique called Text Talk, to help learners increase their vocabulary. In this technique teachers draw attention to certain vocabulary words and supply short definitions to learners while reading storybooks to them. Teachers ask open-ended questions and after reading, vocabulary are discussed in context. This led Beck and McKeown (2007) to state that the most effective strategies to increase vocabulary acquisition are rich instruction within a diverse context beyond storybook reading. They define this type of vocabulary teaching as instruction that 'offers rich information about words and their uses and provides frequent and varied opportunities for students to think about and use words' (Beck *et al.*, 2002:2). Rich instruction includes explaining words in learner friendly language, providing multiple examples and contexts for learning a new word and allowing learners to identify the correct and incorrect ways and situations to use a word.

The effect of rich, interactive instruction on the vocabulary learning of groups of kindergarten and Grade 1 learners was investigated by Beck and McKeown in 2007. Learners were read to by their regular classroom teacher. The learners in the experimental groups were taught vocabulary directly and learners in the control groups were given no additional instructions. Learners in the experimental groups acquired significantly more words. In a second study (Beck & McKeown, 2007) the vocabulary gains of kindergarten and Grade 1 learners were again investigated. This time the control groups received three days of vocabulary instruction and the experimental groups received six days. Results showed that learners in the experimental groups learned twice as many words as learners in the control groups, demonstrating that vocabulary instruction brings about better results. These results also affirm that there is a positive relationship between increased exposure to words and increased word learning.

Penno *et al.* (2002) examined the efficacy of frequent exposure in addition to teacher explanations on the vocabulary growth of 47 learners from diverse backgrounds. The results confirmed that greater vocabulary gains were made when learners

listened to a storybook combined with an explanation of targeted words. A combination of repeated exposure and explanations were found to be more beneficial than either strategy in isolation. Roberts (2008) refers to the research by Elley (1989), which provides evidence about the extent to which learners' vocabulary expands when they are read to. From a single reading 4% of the target words were learned. On the other hand, from multiple readings, 10 – 15% more words were learned. The implication of these results is that, in order to optimize learning, it is important to expose learners to the vocabulary multiple times.

Another dimension of storybook reading was investigated by Ard and Beverly (2004). In their research they concluded that it is not only the reading intervention that is beneficial for the improvement of the learners' vocabulary, but also the questions, comments and interaction with the adults that accompany the reading. Reading storybooks aloud to learners was found to be especially powerful when the reader engaged the learner in a conversation about the book. Such conversations help learners learn new words and concepts. Storybooks that are intended for young learners often include themes and allusions to things outside the learner's frame of reference and everyday experience. While reading to learners, adults explain and interpret these things to their listeners, elaborating and enriching not only the children's vocabulary but also their knowledge base. These interactions will have the added benefit of acquainting learners not only with the L2 language and vocabulary, but also with the L2 culture, customs and history. The type of interactive practices that were found to be effective were, amongst others, asking questions, expanding on the responses the children gave, explaining vocabulary and responding verbally and also with non-verbal signals (Ard & Beverly, 2004). Beck and McKeown (2007) agree that reading aloud from children's literature combined with rich, focused instruction on unknown words enhances children's vocabulary. Research findings of Dickinson and Smith (1994) make it evident that interactive and analytical talk to children during storybook reading sessions enhances their language and vocabulary development.

In short, the current viewpoint in the field of early childhood development is that storybook reading is an effective way to support vocabulary growth, especially if it is combined with adult mediation in the form of interactive and explicit vocabulary instruction (Hoffman *et al.*, 2014). The explicit vocabulary teaching strategies used

during storybook reading that facilitate word acquisition are the quality of the learning activities, the interaction with the reader, the degree of involvement in the story and the frequency of exposure to a word (Elley, 1989; Hulstijn, 2001).

#### **2.6.4 Literacy transfer between the L1 and L2**

Another dimension that needs to be taken into account when looking at L2 vocabulary acquisition is the effect of L1 literacy on L2 literacy and vocabulary development (Riches & Genesee, 2006). Also refer to 1.2 and the discussion on Chomsky's idea of universal grammar.

In 2008 Roberts researched explicit vocabulary learning by investigating whether L1 storybook reading would contribute to second language vocabulary learning. The premise was that it would since storybook reading helps to improve learners' knowledge of the concepts and linguistic measures found in books, known as prior knowledge. Prior knowledge becomes embedded in language and vocabulary and makes it possible for children to make sense of and understand books and stories. It has been established that a learner's L1 is positively correlated to development of literacy and vocabulary in a L2 (Cummins, 1979; Riches & Genesee, 2006).

According to the Linguistic Interdependence Hypothesis (LIH) cross linguistic transfer can take place and competencies and skills can be transferred from one language to another (Cummins, 2000). The ability to read well in the L1 can thus be transferred to L2 reading (Cummins, 1979). Young children's oral language vocabulary, when enhanced through the shared reading of picture books either in English (their L2) or their L1, has been shown to increase not only L1 vocabulary, but also vocabulary development in the second language (Roberts, 2008). Riches and Genesee (2006:77-78) offer evidence not only that L1 literacy development and reading ability in the L1 support literacy development in the L2 but also that L1 reading ability is a predictor of L2 reading ability. Vygotsky (1978) developed the concept of a 'zone of proximal development'. This is significant to L2 acquisition because the concept entails that all learning builds on existing learning and that new skills can be developed using the existing foundation. Consequently, an understanding of the principles of literacy and a certain level of proficiency in the L1 will help the development and acquisition of the L2 (Taylor & Coetzee, 2013). Conversely, if the L1 is not sufficiently developed learners would not be able to draw on the 'zone of

proximal development' when learning a L2. This links to the current study's focus on low SES communities and the importance of L1 development in these communities. If L1 literacy skills are poor, this may have negative consequences for L2 development. However, the Linguistic Threshold Hypothesis further states that unless a certain level of language proficiency has also been achieved in the L1, L2 literacy skills cannot be transferred from the L1 to the L2 (Cummins, 1979).

In order to explain the concept of literacy transfer Cummins (1981) developed the notion of a common underlying proficiency (CUP). This knowledge and set of skills form the basis for language development and once this CUP has been developed learners can apply the principles to any additional language learned. He further asserts that learning experiences in either the L1 or the L2 'can promote development of the proficiency underlying both languages' (Cummins, 1981:25). In other words, literacy is shared across languages, and once it has been attained in one language, it can promote literacy development in another (Cummins, 1979). There is a continual interaction between the L1 and the L2 when speaking, reading or writing and this transfer of knowledge and skills from one language to the other is referred to as cross-linguistic transfer by Koda and Zehler (2008).

The study by Roberts (2008) examined how L1 primary language or L2 English language storybook home reading, followed by classroom storybook reading and vocabulary instruction in English, influenced English vocabulary acquisition. Subjects of the study were preschool children (N = 33) from low socio-economic status families, whose primary language was either Hmong or Spanish. There were two six-week sessions of combined home and classroom storybook reading. On analyzing the data, Roberts (2008) found that the L2 learners acquired a considerable amount of new English vocabulary through English storybook home reading and classroom experiences. L1 home storybook reading proved to be just as effective for English vocabulary learning as home storybook reading in English (the L2). However, when the L1 home reading was combined with explicit classroom instruction the learners outperformed the L2 home reading groups (Roberts, 2008). Roberts believed that this was due to the fact that learners developed primary language concepts and vocabulary through the home reading and classroom lessons and that these concepts were then applied to related English vocabulary. This result was only for the first six-week cycle of the intervention and was not duplicated in the

second six week period. Nevertheless, Roberts' research confirms that young English learners' oral vocabulary is enhanced through the shared reading of picture books either in the L2 (English) or the L1 (Roberts, 2008).

Roberts (2008) offers support for the findings of Ard and Beverly (2004) maintaining that one of the reasons L1 storybook reading could be beneficial for second language vocabulary expansion is the advantages derived from socio-linguistic interaction during the reading process. The interaction that learners have with adults during storybook reading helps with language and vocabulary enlargement and production and conceptual expansion. Reading to learners gives adults the opportunity to tell learners about their culture, language, customs and history. The vocabulary that are used are therefore not only the ones that are in the particular story. In this way learners acquire a wide knowledge of their primary language and, as these skills and competencies can be transferred from one language to another, the interaction will in turn positively influence the learners' vocabulary and ability to function in the second language (Roberts, 2008).

The transfer of literary skills from the L1 to the L2 is particularly pertinent in the South African context as the Curriculum and Assessment Policy Statements (CAPS) state that the language literacies and skills that learners possess in their L1 must be used to develop their L2 (Department of Basic Education, 2011a:08). However, in South Africa, the majority of learners come from an oral literature tradition, as opposed to print based literature (Pretorius, 2002:190). As a consequence young children, particularly in low-SES communities, do not grow up with books and print based reading material and are not exposed to storybook reading before they start school (Pretorius, 2002; Howie *et al.*, 2008). Because of this, young learners often struggle to learn to read. In addition, even though South Africa has 11 official languages, very few basal readers are printed in the African languages and publishing houses mainly print in English and Afrikaans and very few books are available in the other African languages (Pretorius, 2002; Fredericks & Mvunelo, 2003). In fact, despite having 12% of the world's population, Africa produces only 2% of the world's books (Makotsi, 2004). Furthermore, Fredericks and Mvunelo (2003) found that the responding libraries in their research contain mostly English and Afrikaans books with other African languages making up less than 1% of the collections; indicating the limited availability of literature in African languages. Makotsi (2004:5) maintains

that in oral cultures reading material and libraries are often seen as redundant. All these various factors result in learners reaching Grade 4, when they switch from the L1 to English as the medium of instruction, with poor reading abilities and literacy skills in their L1 (Pretorius, 2002).

The results of both the 2011 and 2016 Progress in International Reading Literacy Study (PIRLS) underscore learners' poor reading skills. South African learners' whose L1 is an African language (a language other than English and Afrikaans) and tested in the particular African language scored well below 300 points; indicating low reading levels (Howie *et al.*, 2017). As a matter of interest, all the South African learners scored below the international benchmark of 500 points (Van Staden & Howie, 2010; Howie *et al.*, 2017). This led Howie *et al.* (2008) to conclude that Grade 4 learners whose L1 is an African language are not functioning at an adequate level in their mother tongue. Msila (2011:56) studied township children who attended English preschools and found that their isiXhosa language skills were minimal and that 'one could see they could not understand many basic sentences.'

Sibanda (2017:5) highlights the poor reading performance of Grade 3 learners in the ANAs, even though the reading comprehension test was done in the home language (HL), asking the question, 'what will be transferred from where?' Overall, the harsh reality of the situation in South Africa is that when learners switch from their L1 to English in Grade 4 many black learners have 'barely mastered reading comprehension skills in their primary language' (Pretorius, 2002:191). Consequently, learners have very little transferrable literacy skills to transfer from their L1 to their L2.

In addition, Sibanda (2014) researched the teaching practices of Grade 3 isiXhosa teachers and found that the L2 of the learners in these classes were inadequately developed, thus according to the Linguistic Threshold Hypothesis, transfer of L1 literacy competencies to the L2 cannot occur. Consequently, learners experience difficulty in transferring literacy skills from the L1 to the L2 (Wilsenach, 2015).

## **2.7 SOCIO-ECONOMIC STATUS (SES) AND VOCABULARY ACQUISITION**

As illustrated in the preceding sections vocabulary is a key element in language learning, literacy and reading comprehension. In the long term study of vocabulary development by Hart and Risley (1995) differences in vocabulary size have been

noted in children as young as 18 months. These differences widen as children grow, leading to individual learners entering school with different vocabulary sizes (Hart & Risley, 1995). Wilsenach (2015:1) remarks that this is a worldwide occurrence and that learners 'arrive in school exhibiting a marked difference in their vocabulary.' This difference remains as Biemiller and Slonim report in their 2001 study in which Grade 2 learners in the top quartile for vocabulary had almost double the word knowledge compared to learners from the lowest quartile. One factor that has been established in determining learners' vocabulary acquisition and literacy is socio-economic status (Hart & Risley, 1995; Beck & McKeown, 2007; Wilsenach, 2015). Beck and McKeown (2007) refer to studies showing that amongst Grade 1 learners those from higher socio-economic backgrounds have twice the vocabulary size of learners from low SES backgrounds. Furthermore, parental talk and language interaction with caregivers are linked to vocabulary development in young children (Hart & Risley, 1995; Ard & Beverly, 2004). Learners from wealthy homes, where language interaction takes place and exposure to print is higher, know more words than their peers from poorer homes where interaction is limited. This is partly due to the fact that parents of learners from low SES homes have little education and low literacy skills themselves (Hart & Risley, 1995; Spaul, 2015). There is evidence that children from lower SES families build vocabulary at a slower rate than children from higher SES resulting in learners from poor families entering school with a smaller vocabulary than learners from middle-class homes (Hart & Risley, 1995). Once established, these differences in vocabulary knowledge between learners tend to persist and in fact, the gap grows wider as they continue their schooling (Biemiller & Slonim, 2001; Penno *et al.*, 2002; Beck & McKeown, 2007). The South African education system is largely split along socio-economic lines (Spaul, 2015:30) and the debilitating effect this has on learners' school performance will be discussed in more detail in 2.9.3.

In 1986 Stanovich coined the term 'Matthew effect' to describe the differences between the learners who read well and those who do not. It is based on the Bible verse in the Gospel of Matthew 25:29: 'for unto everyone that hath shall be given, and he shall have abundance. But from him that hath not shall be taken away even that which he hath.' The general premise of the Matthew effect is that both advantages and disadvantages increase over time; the rich get richer and the poor

get poorer. Learners, who begin school with a good vocabulary and learn to read well, will enjoy reading and will read. Consequently their reading competence and vocabulary will improve, which in turn will make it easier and more enjoyable for them to read. On the other hand, learners who enter school and lack adequate vocabulary have difficulty in making meaning from what they read and struggle with learning to read, they therefore dislike reading, read less and fall further and further behind. Thus the gap between strong and weak readers widens as the learners progress in school. A study by Robbins and Ehri (1994) offers support for this theory by revealing that young learners with a lower initial vocabulary were less likely to learn new words from storybook reading than young learners with a bigger initial vocabulary.

In the light of the above it is reasonable to argue that literacy programmes that target vocabulary development and reading skills must form a vital part of any pre-school curriculum. These intervention programmes must start before formal schooling (refer Section 2.8.1 on the importance of emergent literacy) to prevent any reading difficulties becoming from fixed, because once established these disadvantages not only continue to grow, but impact negatively on academic achievement (Biemiller & Slonim, 2001).

## **2.8 EARLY LITERACY**

In our modern-day literate society learning to read is an important and necessary accomplishment for children. Some children achieve this feat without much difficulty, while others struggle and a significant number find it problematic (Whitehurst & Lonigan, 1998). Early literacy is concerned with the earlier phases of literacy that occur in the period between birth and the time when children conventionally begin to read and write. There is a growing body of research and knowledge on early literacy development and various perspectives and theories regarding children's literacy acquisition and development and each perspective 'emphasizes the importance of social influences and social interaction on literacy learning' (Tracey & Morrow, 2012:100). The emphasis on early literacy theory is however, not solely on the social influences, but includes the development of literacy and how early literacy development can be facilitated (Tracey & Morrow, 2012:76). The body of research on early literacy includes the important 1979 work by Holdaway entitled *The*

*foundations of literacy.* Holdaway (1979) regards learning to read as a natural developmental process; as children are exposed to reading and observe their parents reading they will naturally imitate this behaviour. This perspective differs from the older reading-readiness viewpoints of literacy which hold that there is a 'time when a child is capable of learning how to read,' traditionally associated with the time a child goes to school (Whitehurst & Lonigan, 2001:12). In other words, learning to read begins with formal instruction like letter recognition and school based learning because before that the child is not yet 'ready' to read or write. Whereas the reading readiness theories created a boundary between what is considered 'real reading', as taught in school, and everything that comes before; early literacy proponents realize that children already know a lot about reading before they begin formal reading instruction and that literacy development begins long before children go to school (Whitehurst & Lonigan, 2001:12). In fact, all literary pre-school activities are seen as part of literacy development since literacy is regarded as a continuum; a dynamic process that starts at birth (Whitehurst & Lonigan, 2001:12). Children do critical cognitive work from birth to age six and the quality of the instruction that children receive during that period is vital for a child's later success as a reader or writer (Whitehurst & Lonigan, 2001:12).

### **2.8.1 Emergent literacy**

Emergent literacy is defined by Whitehurst and Lonigan (1998:849) as 'the skills, knowledge, and attitudes that are developmental precursors to conventional forms of reading and writing' as well as the environments that support these developments. An emergent literacy approach departs from other perspectives on reading acquisition in suggesting that there is no clear demarcation between reading and pre-reading (Lonigan, Burgess & Anthony, 2000).

Emergent literacy encompasses all the abilities that children develop in relation to reading and writing before the actual start of conventional reading and writing instruction. Young children are thus susceptible and open to storybook reading and its benefits at a much younger age than was initially thought to be the case (Ntuli & Pretorius, 2005). According to Whitehurst and Lonigan (1998:840) the concept of 'emergent literacy' was first used by child psychologist, Marie Clay in 1966. Clay (1967) investigated early reading behaviour in order to identify reading problems as

early as possible. The research by Clay (1967) indicated that children as young as 5 years can engage in literacy and reading behaviour. The term and field of emergent literacy was further elaborated in Teale and Sulzby's 1986 book *Emergent Literacy: Writing and Reading*. Teale and Sulzby (1986:xix) argue that the term 'Emergent Literacy' should be used instead of *pre-reading*, as the first years of a child's life is when reading and writing development takes place and this process is legitimate and not *pre-* anything.

There are three primary components of emergent literacy: oral language, understanding that print carries meaning, and phonological awareness. These three aspects are also believed to be related to conventional reading and writing (Whitehurst & Lonigan, 1998). Oral language is the child's ability to use vocabulary in order to understand and be understood, print knowledge is children's awareness of how print is organized and phonological awareness is the child's ability to distinguish and use the different sounds of spoken language (Goodrich, Lonigan & Farver, 2013:215).

Emergent literacy skills can be measured as early as preschool and have been found to be an indication of children's later reading skills (Whitehurst & Lonigan, 1998; Goodrich *et al.*, 2013). Reading skills, in turn form a critical part of the foundation of children's academic development and success (Whitehurst & Lonigan, 2001:11). In research by Cunningham and Stanovich (1997) Grade 1 reading ability was found to be a strong predictor of a variety of Grade 11 reading abilities. The beneficial effects of early literacy thus has implications for when children should be exposed to books and storybook reading. Clearly, children's emergent literacy skills should be strengthened during early childhood. Literacy skills include attitudes and expectations about reading and the written language, as well as an awareness of language. These competencies are, for the most part, not taught explicitly but are skills that the young child picks up unconsciously through verbal and social interaction with adults (Ntuli & Pretorius, 2005).

Early literacy instruction can be as simple as a parent or adult taking a child to the library; reading to a child, putting the child on his or her lap and allowing the child to hold the book and turn the pages, showing them the words and pictures, and demonstrating (even unintentionally) that we read from top to bottom and left to right.

This not only teaches the child the conventions of reading, but also makes reading an enjoyable experience and the child will probably continue to feel positive about reading. A positive emergent literacy experience leads to an interest in reading that predicts the amount of future reading a child will do (Stanovich, 1986). A literacy-rich home environment where children have access to books and print, in which caregivers read to children and there is language interaction are important factors for emergent literacy development. Children who receive this type of exposure begin school with strong, well developed literacy skills. In contrast, children who do not have many experiences listening to storybook read-alouds, exposure to books and adult interaction typically have poor early literacy skills and are at a disadvantage when entering school (Whitehurst & Lonigan, 2001). Consequently children enter school with hugely divergent literacy skills, again pointing to the effect of SES status on literacy development. Children who lack early literacy are likely to have difficulty with learning to read in the primary grades and this can hinder learning in other academic areas which are dependent on reading (Lonigan *et al.*, 2000). Inversely young children who experience print exposure start to read early and well and consequently cope better with academic demands (Cunningham & Stanovich, 1997). Therefore, because emergent literacy is so important and has an influence on later academic achievement, it should be developed and strengthened during early childhood. Ideally early literacy programmes with specific instructional practices should be developed. One educational practice that successfully enhances emergent literacy is storybook reading (refer 2.4.2). In essence this reading practice emphasize shared book experiences, engaging young children in reading activities and introducing them to books and book concepts. Holdaway (1979) proposes a rich literacy classroom where key items are labeled and children are exposed to high quality children's literature. These instructional practices will ensure that children have the necessary literacy skills when entering school and so reduce the disparities between them as well as prevent (or at least reduce) future reading difficulties (Lonigan *et al.*, 2000). The implication, therefore, is that by actively including storybook reading and explicit vocabulary instruction teachers can, to some extent, address any gap that may exist in Grade 1 learners' pre-school literacy development.

## **2.9 SECOND LANGUAGE EDUCATION IN THE SOUTH AFRICAN CONTEXT**

A discussion about South African learners would not be complete without a look at the South African education system; a system rooted in our country's very unique and complicated history. The South African education system faces very distinctive challenges, voiced by the African National Congress (1994):

*Apartheid education and its aftermath of resistance has destroyed the culture of learning within large sections of our communities, leading in the worst - affected areas to a virtual breakdown of schooling and conditions of anarchy in relations between students, teachers, principals, and the education authorities.*

Although the political scene changed dramatically since 1994 it has become clear that the negative repercussions of the Apartheid system and its devastating influence on our society and education is not going to be eradicated overnight. At the moment, despite education being about 15% of government spending, learners are performing poorly in both literacy and numeracy (Pretorius & Spaul, 2016).

### **2.9.1 Curriculum and Assessment Policy Statements**

As mentioned in 1.2 the South African education system has undergone considerable transformation and changes over the last three decades. After the 1994 political transition the post-apartheid government prioritised education as an area of integration and reform (Spaul, 2012:2). The racially-defined Departments of Education were abolished and nine provincial Departments of Education were established to operate in association with a single national Department of Education (Spaul, 2012:2). Although some of the changes have been positive, trying to rectify the inequalities of the past, there is still room for improvement.

In order to strengthen curriculum implementation from 2010 and improve the quality of teaching and learning in all South African schools the content of the South African National Curriculum Statement (NCS ) Grades R-12 was amended and organized into the Curriculum and Assessment Policy Statements (CAPS) (Department of Basic Education, 2011a:1). Policy documents were drawn up for each of the approved subjects from Grades R – 12. In April 2011 the National Education Policy changes were promulgated in the Government Gazette and tabled in Parliament

(Department of Basic Education, 2011a:1). The new CAPS curriculum was implemented in South African schools from the beginning of 2012 (Department of Basic Education, 2011a:1). In this curriculum, every subject in each grade has a comprehensive and concise CAPS providing details of content and assessment. The CAPS document stipulates that a First Additional Language (English) must be added to the curriculum in the Foundation Phase (Grades R – 3). English First Additional Language should have an instructional time of between two to three hours per week in Grade 1 and, at the end of the grade, learners should be able to understand 700 – 1000 words in context (Department of Basic Education, 2011a). Strategies and activities to expose learners to the L2, and build their language, are set out in the CAPS document. The document sees the essential measure of English (L2) literacy in Grade 1 as communication and comprehension. At this stage, as learners are unable to read, the focus is on developing oral vocabulary and language, and promoting listening and speaking skills. To this end, learners are exposed to a large amount of oral language input in the form of stories and oral instructions. Vocabulary and grammar are believed to be the foundation of the skills of listening, speaking, reading and writing (Department of Basic Education, 2011a:17). The CAPS document acknowledges that many learners lack an adequate vocabulary to make sense of what they read and states that ‘the teacher must build their vocabulary’ (Department of Basic Education, 2011a:16). Specifically how the vocabulary must be built is not set out in the CAPS document; the document only states that ‘In Grade 1, vocabulary and grammar are learned incidentally through exposure to the spoken language’ (Department of Basic Education, 2011a:17). Vocabulary can therefore be acquired incidentally through input such as storybook reading in which learners listen to and interact with the teacher. This corresponds with the objective set out in the CAPS that Grade 1 learners should learn L2 vocabulary in context. On the other hand if one looks at the level of L2 proficiency and the poor comprehension and communication skills of learners, even in Grade 3, the question arises as to how effective the L2 method of vocabulary instruction is.

Furthermore, CAPS relies on the assumption that home language literacy, knowledge and skills can be transferred to the L2, the LIH (refer 2.9.1). This reflects an additive bilingual approach in teaching the L2 and is based on the belief that learners enter school with a certain level of proficiency in their home language and

that these literacy skills can then be transferred to the L2 (Cummins, 2000; Taylor & Coetzee, 2013). It can however be argued that this is not always the case and that, especially in rural and disadvantaged schools, learners come to school with very limited literacy skills, even in their home language (refer 2.7). In addition, as discussed in 2.6.4, various factors influence the transfer of literacy competencies between languages and the process is more complex than indicated in the CAPS. The belief that young learners have a certain level of proficiency in their home language is consequently a dangerous assumption to use as the basis for L2 teaching and can potentially have negative consequences for literacy teaching.

### **2.9.2 Annual National Assessments**

South Africa participated in a number of educational achievement tests, both locally and internationally. The Annual National Assessments (ANAs) were implemented nationally in February 2011 and is an annual, nationally-standardised test of achievement for Grades 1 - 6 and 9; testing numeracy and literacy. The purpose of the assessments is to provide information about learning in the primary grades, to identify where learners are falling behind, to hold primary schools accountable and to improve the quality of education (Spaull, 2012).

The 2011 ANAs were externally verified by the Human Science Research Council. The 2012 ANAs were however, not externally verified, although the Department of Basic Education moderated some of the papers (Spaull, 2012). The 2011 ANAs indicated that the vast majority of learners underperform in relation to the curriculum, and that only 35% of learners can read, with results ranging from 12% in Mpumalanga to a 'high' of 43% in the Western Cape (Department of Basic Education, 2011b). Subsequently the 2012 ANAs presented very large, questionable increases in the results of the Foundation Phase. The year-on-year increase for Grade 3 literacy, for example, was 49%. Consequently the ANAs results came under considerable critique by academics across the country (Spaull, 2012). Among the criticism expressed against the ANAs were that it differs in difficulty level from year to year and grade to grade and therefore cannot be regarded as a reliable measure of learner performance (Spaull, 2015). Nevertheless, the ANAs were again written in 2013 and 2014, but in 2015 the assessments came under severe attack from the teachers' unions who argued that they did not have enough time to prepare

learners for the ANAs. Consequently the ANAs were postponed and eventually only some schools wrote the 2015 ANAs.

The datasets from the ANA (2011 - 2014, Grades 1 - 6 and 9) were analysed by researchers and educational bodies and yielded a considerable amount of information about the performance of South African learners (Van der Berg *et al.*, 2011; Spaul, 2015). Unfortunately the picture that emerged was dismal. The vast majority of South African primary school learners are below where they should be in terms of the curriculum and have not reached all their literacy and numeracy milestones (Spaul, 2015). In fact, South Africa has the lowest average score of all developing countries taking part in international assessments like the Progress in International Reading Literacy Study (PIRLS) and The Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ). South African learners perform worse than other countries which are considerably poorer, such as Kenya, Swaziland and Tanzania (Van der Berg *et al.*, 2011; Spaul, 2015). In the 2016 PIRLS around 78% of South African Grade 4 learners did not reach the lowest benchmark, compared to 4% internationally (Howie *et al.*, 2017:4). These results imply that South African learners “do not have basic reading skills at the end of the Grade 4 school year” (p.11). Furthermore, there is “no statistically significant difference between the two rounds of participation for 2011 (323) and 2016 (320)” (Howie *et al.*, 2017:5) – regrettably reading literacy in South African primary schools is not improving.

### **2.9.3 The bimodality of school performance**

Spaul (2015:29) writes that, on analysing the datasets of achievement tests it becomes clear that there are in fact two different public school systems in South Africa split largely along socio-economic, geographical, language and historical lines. The SACMEQ assessment, which is put together by psychometric experts, revealed that there are geographic inequalities in the South African school performances. The 2007 SACMEQ test showed that a shocking 41% of rural Grade 6 learners are functionally illiterate as opposed to 13% of urban learners. These results are confirmed by the 2016 PIRLS study in which Grade 4 learners from remote, rural areas achieved significantly below their peers from urban and suburban areas (Howie *et al.*, 2017). On the other hand, there is a small group (20 – 25% of the

school population) of wealthy learners who attend functional schools and perform significantly better than the vast majority (75 – 80%) of poor learners (Spaull, 2012).

Spaull concludes that there is a 'bimodal distribution of performance in South Africa' (Spaull, 2015:29). The undeniable truth is that even in post-apartheid South Africa the school system is still segregated. The education system is divided not along race lines anymore, but along class lines. A minority of learners from the higher socio-economic sector attend more affluent and good quality schools, the majority of learners however, come from poorer, rural areas and are excluded from these schools. The low-quality education received by these learners places them at a disadvantage and acts as a 'poverty trap' (Van der Berg *et al.*, 2011:2; Spaull, 2012). Van Staden and Howie (2010) agree by affirming that schools that were previously designated for White learners remain effective and exclusive (although the exclusivity is now based on SES and not race). Previously disadvantaged schools still struggle with overcrowded and ill-equipped classrooms, high dropout rates, teacher absenteeism, unqualified teachers, ill-discipline and ineffective management (Spaull, 2012). These historically black schools are mainly situated in the townships and rural areas of South Africa, still experience dysfunctionality and ineffectiveness and are mostly attended by poor, non-white learners (Msila, 2011:62).

Spaull (2012:8) contends that learners' school performance is in accordance with their socio-economic status and that, in South Africa the 'inequalities in educational outcomes between wealthy and poorer learners are already large and firmly entrenched by the age of eight' (Spaull, 2015:35). The author continues that learners from poorer homes have poor reading and writing skills in Grade 3, at the end of the Foundation Phase, and that it is very difficult for learners to make up for this disadvantage in later years (Spaull, 2015:35). Research results by Msila (2011:65) substantiate this view, showing that the language inequalities between township schools and former white schools grow as learners progress in school. This links back to the Matthew effect as discussed in Section 2.7.

The dualistic nature of the South African education system has the unfortunate consequence that education does not empower learners, but is rather 'one of the key mechanisms through which an unequal society is replicating itself' (Spaull, 2015:38). Although not part of the scope of this research, a table, drawn up by Spaull (2012:7),

depicts the distribution of various school results according to the wealth quartiles, and makes for interesting reading. Refer Appendix 10 for a copy of the table.

Given this unequal nature of the South African education system Spaul (2015:30) continues that it is misleading to look at average scores because national averages overestimate the performance of the majority of South African learners. However, even if it is deceptive the national and provincial averages of learner performance remain the most commonly reported measure of achievement in government and international reports.

#### **2.9.4 Language of learning and teaching**

For many South African learners, access to higher education and the labour market depends on becoming fluent in English (Taylor & Coetzee, 2013; Spaul, 2015). As discussed earlier (refer 1.2) there are various theoretical frameworks relating to language acquisition. The South African Language-in-Education Policy states that for Grades 1, 2 and 3 the language of learning and teaching (LoLT) is a learner's home language. This is the Transitional Model of language acquisition which stipulates that learners' home language is used in the first few years of schooling (Grade 1 – 3) and is followed by a transition to the L2 (in South Africa this is English) as the LoLT (Taylor & Coetzee, 2013). The motivation behind this is to encourage additive multilingualism and draws on the Linguistic Interdependence Hypothesis (Cummins, 2000). The premise is that although proficiency in a language takes time to master there is a great interdependence between literacy skills across languages (Cummins, 2008; Taylor & Coetzee, 2013). In other words once the home language is mastered the literacy skills can be transferred to the L2.

The language policy does not stipulate which of the 11 languages should be used, but leaves the choice of LoLT to the School Governing Bodies. The School Governing Body is made up of parents, the school principal and teachers. In South Africa, because of the numerous first languages spoken, good quality First Language education is not always provided (Taylor & Coetzee, 2013). Although not part of the official policy, Education Departments encourage schools to change their LoLT in Grade 4 to English (following the Transitional Model), this despite the fact that English is neither the home nor first language for most learners (Taylor & Coetzee, 2013; Pretorius & Spaul, 2016). Even though South Africa has 11 official languages

English is regarded as the international lingua franca and perceived as the language of education, politics, economic empowerment and social advancement. Consequently, parents see English as the language of empowerment and economic prosperity, the language of a better future, and prefer to have their children educated in English rather than their indigenous language (Pretorius & Mampuru, 2007; Msila, 2011:57). Therefore in most schools where English or Afrikaans is not the Home Language, the School Governing Body elects to change the LoLT in Grade 4 to English (Taylor & Coetzee, 2013). In effect, despite the government's Language in Education Policy that stipulates that learners should be educated in their L1 up until Grade 4 many parents choose to send their children to English preschools and schools (Msila, 2011:49).

During Grade 1 – 3 the emphasis is to teach learners to read, from Grade 4 onwards learners need to be able to read in order to learn (Spaull, 2015). Pretorius (2002:189) calls this the transition from 'learning to read' to 'reading to learn.' It is therefore critical that by the end of the Foundation Phase learners must have the necessary L2 English literacy skills to continue with their schooling in English. This includes reading skills, decoding skills plus a well-developed and comprehensive English vocabulary in order to understand the content of the subjects taught in English. Unfortunately, as indicated in 2.9.3 the level of illiteracy in primary schools, especially in rural schools, is very disconcerting. Learners perform poorly in reading literacy regardless of whether the assessments are performed in the home language (for Grades 1 – 3) or in English and Afrikaans medium schools (Pretorius & Spaull, 2016). Particularly worrying is the decline of academic performance from Grade 3 to Grade 4, when the LoLT changes from the home language to the L2 (Sibanda, 2017). Reading is an important part of literacy and regarded as an essential skill learners need for further academic success (Pretorius, 2002; Pretorius & Spaull, 2016; Sibanda, 2017). Learners struggling with reading to learn are at a disadvantage academically not only in primary school, but also in secondary school and even up to post matric level (Pretorius, 2002; Pretorius & Mampuru, 2007; Sibanda, 2017).

Sibanda (2014) makes a valid point, referring to the fact that while BICS are developed within two to three years CALP takes about five to seven years to develop. In other words, when English L2 learners are expected to use English as

the LoLT in Grade 3 many of them have not developed the sufficient English language proficiency (CALP) to do so. Grade 3 learners are only starting to develop the necessary BICS proficiency and 'still need three to four more years to develop CALP proficiency' (Sibanda, 2017:4). Sibanda (2017) cites the Macdonald (1990) Threshold Project which concluded that three to four years of FAL is not sufficient to adequately develop English in order for learners to use it as the LoLT.

In summary, it is unlikely for learners to be exposed to the novel vocabulary necessary to develop BICS proficiency in everyday conversations. These words, which have a 'powerful effect on verbal functioning' are most likely to be found in written texts (Beck *et al.*, 2002:8). As a consequence interactive vocabulary teaching within the storybook reading context is a powerful vehicle for developing vocabulary (Biemiller & Boote, 2006). In addition, learners enter school with divergent vocabularies (Hart & Risley, 1995) and the initial differences grow larger over time (Stanovich, 1986; Biemiller, 2004). It is therefore important that, in order to develop vocabulary and prevent reading difficulties, explicit vocabulary instruction, in the form of storybook reading, takes place in Grade 1.

## **2.10 CONCLUSION**

This concludes the discussion on the research into vocabulary acquisition and teaching. As can be seen from the existing body of knowledge vocabulary can be acquired either through incidental learning (when learning takes place by chance) or through explicit learning (where words are taught deliberately). However, the research also revealed that vocabulary knowledge is complex and multidimensional and the lack of a well-developed vocabulary is a problem for many L2 speakers. Researchers, teachers and linguists agree that some form of vocabulary curriculum should be developed to enlarge especially L2 learners' vocabulary and that it should be implemented at an early stage. However, the exact form in which the vocabulary teaching has to take place is still open to debate.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

Chapter Three gives a detailed description of the research method that was used in this study and includes information on the data collection methods, instruments, participants and procedures used to collect and analyse the data. In addition, the design of both the pilot study and the main study is discussed.

In the first part of this chapter the research design, research questions and ethical considerations are described in detail. Next the participants, research instruments, materials of the main study and methods employed in the data analysis process are described. The chapter concludes with a description of the pilot study, an analysis of the pilot study results, as well as changes that were made to instruments and procedures based on the pilot study results.

#### **3.2 RESEARCH APPROACH AND DESIGN**

There are two main approaches to (educational) research: qualitative and quantitative (Welman & Kruger, 2001; Dornyei, 2007). Punch (2009:3) simplifies the definitions of these two terms by stating that quantitative research involves data in the form of numbers or information that can be converted into numerical data, while qualitative research generates non-numerical data. This is a basic way of defining the two approaches, but it must be remembered that the distinction between the two approaches also encompasses the fundamental basis on which researchers conceptualise and approach their research.

Qualitative research tends to be exploratory in nature; when making use of this method a researcher explores situations and provides a complete and detailed description in response to the research question(s). Quantitative research, on the other hand, focuses on counting and classifying and makes use of exact measured quantities and figures to explain what is observed (Punch & Oancea, 2009).

Both qualitative and quantitative approaches have strengths and weaknesses and researchers using either are of the opinion that neither approach is better than the other (Punch & Oancea, 2009). This study argues that, for the best research results, qualitative and quantitative methods should be combined, since these two research

methods complement each other and yield more valid and reliable findings when used in combination. The combination of quantitative and qualitative approaches has become increasingly popular and is called the mixed methods approach. However, the quantitative-qualitative distinction is becoming blurred and it is possible to combine different types of data and different ways to collect and analyse data in a research study (Punch & Oancea, 2009:4). Dornyei (2007:42) describes mixed methods research as triangulation data collection as the researcher makes use of various methods of data collection which complement each other. Ultimately it is the research question(s) and the aim of the research which will determine the research approach to be used (Dornyei, 2007).

In this study the research problem and research questions (discussed in 3.3, the next section) informed the choice of research design in order to most effectively achieve the aims of the study. As a result the mixed methods approach — combining both quantitative and qualitative research methods — was selected. This approach was chosen because of its ability to allow the use of the strengths of one approach while at the same time overcoming the weaknesses in the other approach (Dornyei, 2007). The main focus of this study will be on quantitative data, with qualitative data serving to enhance and support the results from the quantitative data analysis. It is the researcher's opinion that a combination of these two methods will provide a better understanding and perspective of the research problem than either of the methods alone.

Mixed methods research methodology has a quasi-experimental design, characterized by the presence of pre- and post-treatments (where 'treatments' are understood as research-relevant interventions) and control and experimental groups. However, the subjects cannot be assigned on a random basis to the groups (Seliger & Shohamy, 1989). Quasi-experimental research makes use of real-life situations and is considered to be more representative of the conditions found in real life education settings. The findings are therefore more readily generalised to the wider population (Seliger & Shohamy, 1989).

In addition to adhering to the mixed-methods research methodology, the study is deductive in nature. According to Seliger and Shohamy (1989:58), deductive research has a specific, focused statement that reflects a preconceived notion held

by the researcher that is to be tested. This study is hypothesis driven and sets out to investigate a hypothesis about L2 vocabulary acquisition, storybook reading and interactive vocabulary instruction. The objective of the research is to prove or disprove the hypothesis and then to draw certain conclusions, based on the research results.

The study was conducted in two parts. The first part was a small-scale pilot study which took place before the main study was started. The second part, which consisted of three phases, was the main study comprising the actual collecting of data and the storybook reading and vocabulary instruction intervention.

### **3.3 RESEARCH QUESTIONS AND HYPOTHESIS**

Research questions were drawn up in order to guide the research and formulate the purpose of this research. The three research questions and accompanying hypothesis are as follows:

#### **Research Question 1:**

- How does second language storybook reading, accompanied by explicit, interactive vocabulary instruction, impact on the vocabulary acquisition of Grade 1 learners?

This research question can be formulated into the resulting hypothesis:

- Second language storybook reading, accompanied by explicit, interactive vocabulary instruction, will have a positive impact on the vocabulary acquisition and development of Grade 1 learners.

#### **Research Question 2:**

- What are the existing vocabulary instruction practices in the participating Grade 1 classes?

#### **Research Question 3:**

- What are the changes, if any, in the Experimental Group Teacher's attitudes and approach to vocabulary instruction before and after the intervention?

### **3.4 PARTICIPANTS**

The various participants involved in the study will be discussed in the following section. The sampling procedure used to select the participants will also be described.

#### **3.4.1 Sampling procedure**

In a research study it would be ideal to test all the members of a population, but in most cases the population is too large for this to be practical. Only a sample of the total population is therefore tested. A sample is a subset of a population that is selected to participate in a research project (Polit & Hungler, 1999). Data for the research are collected from the sample and analysed. The subjects in the sample must be representative of the target population and share the same characteristics as that population in order for the research results to be generalizable (Welman & Kruger, 2001).

This study used convenience sampling (Creswell, 2013), using learners from three existing Grade 1 classes. Convenience sampling was employed so as not to upset routines, teachers' schedules and learners' comfort zones, and it ensured that research observations were in an environment familiar to learners. Using existing classes of Grade 1 learners further met certain practical criteria, such as the classes being geographically accessible to the researcher, and available during school hours, as well as consisting of learners whose L2 is English.

Welman and Kruger (2001:62) define a convenience sample as 'the most convenient collection of members of a population (units of analysis) that are near and readily available for research purposes'. This type of sampling technique is easy, fast and inexpensive. It also makes it easier for the researcher to obtain subjects, but the risk of bias is greater than in a random sample, because each member of the population does not have an equal chance of being included in the sample (Welman & Kruger, 2001).

#### **3.4.2 Schools**

The main study was conducted in two government primary schools, School A and School B, geographically situated within 5 km of each other in the Western Cape

Province of South Africa. The two schools are similar although they differ in socio-economic status (SES), with School A having a lower SES than School B. School A is located in a low economic income area struggling with socio-economic problems such as poverty, unemployment, drug abuse, domestic violence and alcoholism. The home language is Afrikaans for 90% of the learners and teachers. The learners come from homes where there is very little exposure to storybook reading and books and, furthermore, a lot of the parents are themselves illiterate.

School B serves a middle class community where parents are generally considered more literate and learners are exposed to books and reading materials at home. In addition, parents from School B tend to be more involved with the school, making donations, attending meetings, supporting teachers and helping their children with homework. Parents from School A are usually financially not in a position to help the school, are often just seen in the beginning of the year during registration and are unwilling or unable to help their children with homework. Discipline is good in both schools and learners are well behaved and courteous. Table 2 contains a summary of the two schools for ease of reference.

Neither schools have a library. However, in School B there was a reading corner in the Grade 1 classroom used in the study (consisting of books the teacher collected or bought herself) while in School B exposure to books and reading consist mainly of the prescribed Grade 1 reading material.

Both schools are relatively small, rural schools with few resources and make use of the Department of Basic Education's workbooks. School A has one Grade R class and two classes for each grade from Grades 1 to 7; the total number of learners at the school is 363. School B has one class for each of the Grades R to 7 and has a total of 136 learners. On average School A has about 25 learners per class; School B's classes are smaller with an average of 17 learners per class. The teaching personnel at School A consists of 15 full time teachers and at School B there are 7 full time teachers, 1 part time teacher and 2 teaching assistants. The learners and teachers at School A are Coloured and Afrikaans speaking; the learners in School B are White and Coloured and Afrikaans speaking. All the teachers, in both schools, are White and Afrikaans speaking. The language of learning and teaching (LoLT) in

both schools is Afrikaans. English is taught as the First Additional Language (FAL) in both schools.

Table 2: Summary of participating primary schools

	School A	School B
Library	No	No
Make use of Department of Basic Education's workbooks	Yes	Yes
Grade 1 classes	2	1
Average learners in class	25	17
Total learners (Grade R – 7)	363	136
L1 of learners	Afrikaans	Afrikaans
Teaching personnel	15 full time teachers	6 full time & 1 part time teacher(s), 2 teaching assistants
L1 of teaching personnel	Afrikaans	Afrikaans
LoLT	Afrikaans	Afrikaans
Experimental Group	Yes	No
Control Group	Yes, Control Group A	Yes, Control Group B

It is important for the validity of any research that the sample size of a research study is large enough to be considered representative of the target population. This is one of the reasons why two schools were chosen for the research. School A has two Grade 1 classes and School B has one. One class from School A was randomly selected to be the experimental group and the other class served as control group. The Grade 1 class from School B served as an additional external control group, thus making the sample size larger and providing more data.

However, as other research studies mentioned in Chapter 2 have shown, socio-economic and cultural factors have been proven to influence academic performance and vocabulary acquisition.

### 3.4.3 Learners

The participants in this research were Grade 1, English L2 speaking learners from two schools, School A and School B, with ages ranging from 5:10 (5 years and 10 months) to 8:2 (8 years and 2 months). All parents and learners gave their consent for the research study to take place (also refer 3.10).

Of the two Grade 1 classes in School A, Grade 1A had 26 learners and Grade 1B had 25. Upon enquiring, the researcher was told that learners are placed into the two different classes according to when they register for Grade 1. The first 25 learners are placed in one class and thereafter learners are placed into the second Grade 1 class. Learners who enroll during the course of the year are distributed equally between the two classes. The single Grade 1 class in School B had 18 learners. The total participants in the study was therefore 69 (N = 69). In Grade 1A the first language of 24 learners was Afrikaans; for 2 learners it was isiXhosa. In Grade 1B and in the external control group (School B) all learners were L1 Afrikaans speakers. The information is summarized in Table 3.

Table 3: Participants in this study

School group	Learner total	Boys	Girls	Average age	Home language
School A, Experimental Group	26	10	16	7 years, 8 months	Afrikaans (24) isiXhosa (2)
School A, Control A	25	13	12	7 years, 5 months	Afrikaans
School B, Control B	18	8	9	6 years, 10 months	Afrikaans

As explained earlier (refer 3.4.2) one Grade 1 class from School A was randomly assigned to be the experimental group and the other class functioned as the control group. The Grade 1 class from School B served as an external control group. Each participant in the study was given a number. The learners kept this number throughout the study and the number was written on all the worksheets the Experimental Group did. In this way the anonymity of the learners was ensured. In

addition, this served to protect the learners and counter any bias there might be on the side of the teachers and/or researcher.

### 3.4.4 Teachers

The teachers involved in the research study were the assigned teachers of the three groups and were all female, Grade 1 teachers. All three teachers gave their consent to take part in the study. In order to protect the anonymity of the teachers, for the purpose of this study they will be referred to using the name of the group they teach. The teacher of the Experimental Group (hereafter referred to as Teacher EG), has been teaching for seven years—initially, as an Intermediate Phase teacher and, for the last three years, as a Grade 1 teacher. The Control Group A teacher (Teacher CA), has 16 years’ teaching experience and Control Group B’s teacher (Teacher CB), has twenty-six years teaching experience and is therefore the most experienced teacher of the three. The teachers were amenable towards the study and the teacher from the Experimental Group was enthusiastic about the intervention and committed to the training. The biographical information of the teachers is presented in Table 4.

Table 4: Teachers’ biographical information

	Age	Gender	Home Language	Teaching Experience
Teacher EG (Experimental Group)	31	Female	Afrikaans	7 years
Teacher CA (Control Group A)	44	Female	Afrikaans	16 years
Teacher CB (Control Group B)	50	Female	Afrikaans	26 years

The home language of all three teachers is Afrikaans and, while their English proficiency is satisfactory, it is also clear from their accents and grammar that English is not their first language. Only one teacher, Teacher CB, consistently spoke to learners in English during the L2 periods. The other two teachers made use of both English and Afrikaans, with most of the explaining and instructions taking place in Afrikaans. Both teachers seemed reluctant to speak English and would habitually revert back to Afrikaans during AL lessons.

The following section will provide information regarding the three research instruments used in the research study.

### **3.5 RESEARCH INSTRUMENTS**

Research instruments refer to the tools and processes used to collect data (Welman & Kruger, 2001). Three instruments were used in this research study — firstly, the Peabody Picture Vocabulary Test IV (PPVT-IV) was used to determine the receptive vocabulary skills of the learners. It also served as the data gathering instrument of the quantitative section of the research. Secondly, the researcher drew up and made use of classroom observation sheets to obtain information regarding the existing vocabulary instruction practices in the three Grade 1 classes. Lastly, individual semi-structured interviews were conducted with the Experimental Group's teacher before and after the intervention. This was done in order to ascertain her attitudes and approach to vocabulary instruction. The data from the observation sheets informed both the qualitative data (from the PPVT-IV scores) and the qualitative data (from the semi-structured interviews). In the following section an overview of the research instruments is provided.

#### **3.5.1 The Peabody Picture Vocabulary Test IV (PPVT-IV)**

The Peabody Picture Vocabulary Test IV (PPVT-IV) is the diagnostic test that was administered to all the learners (in the experimental and control groups) before the intervention, as a pre-test, and after the intervention as a post-test. The researcher decided to make use of the PPVT-IV because it is one of the most commonly used instruments for assessing receptive vocabulary and has been proven to be valid and reliable, with reliability and validity coefficients in the range of .90 (Dunn & Dunn, 2007). It is norm-referenced and standardized and simple to score. Hoffman and Trousdale (2013:6) state that as far as the PPVT-IV is concerned 'we find it adequate as a general measure of receptive vocabulary.'

The PPVT was originally developed by Dunn and Dunn in 1959 to measure receptive vocabulary size and acquisition of L2 English speaking individuals. Since then various revised and improved versions have been developed by the same researchers. The PPVT-IV version, as the name indicates, is the fourth edition of this instrument and was developed by Dunn and Dunn in 2007. In this fourth edition

of the test easier items were specifically added to enhance the assessment of younger learners. It contains two alternate forms – form A and form B.

The two parallel forms allow for testing subjects at different times to compare performances and measure change without confound or practice effects (Dunn & Dunn, 2007). Both forms consist of 228 test items that are divided into 19 sets of 12 words each, and are ordered from easy to more difficult. Respondents begin with a set of 12 items based on their age. The ‘starting age’ of the test is two years and it extends to ninety years and up (Dunn & Dunn, 2007).

The test is administered verbally and no reading or writing is required from the test subjects. This makes the PPVT-IV ideal to use with younger subjects, such as Grade 1 learners, which was one of the reasons why this test was chosen. The researcher pronounces a stimulus word that has a corresponding image plate containing four numbered images (refer Figure 1), one of which best matches the meaning of the stimulus word.

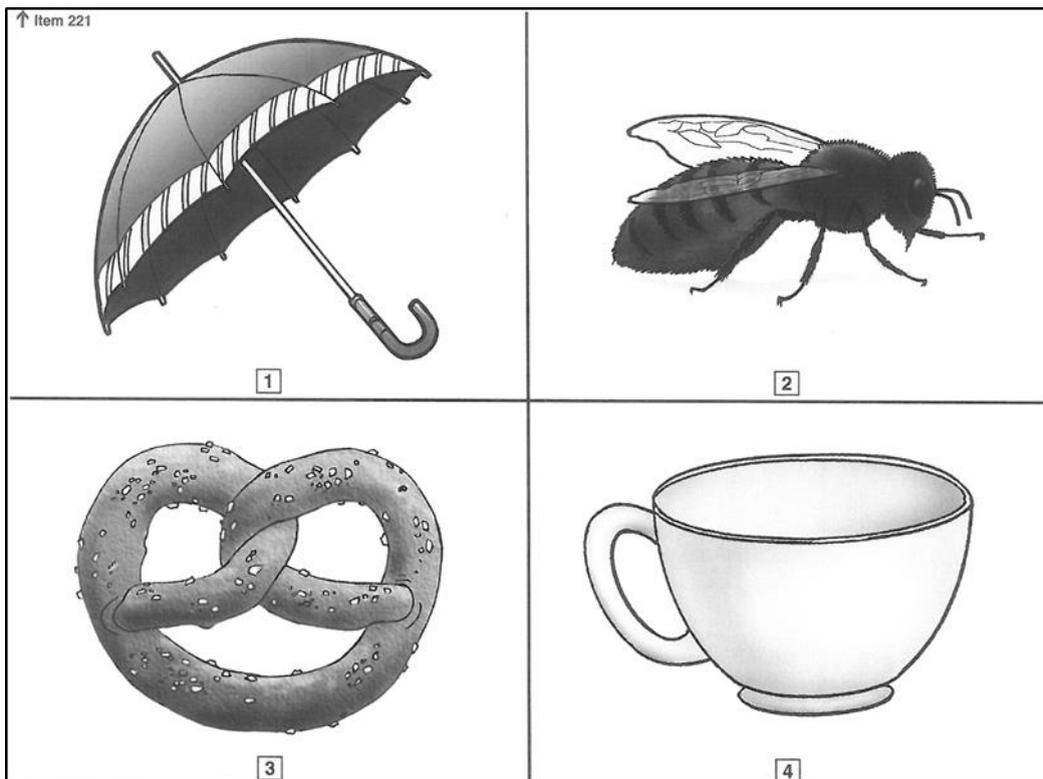


Figure 1: Image plate containing four pictures for the stimulus word ‘cup’

The test subject is shown the image plate containing the four numbered images, and has to match the word spoken by the researcher with the correct numbered image by

either pointing to the image or by saying the number of the image out loud. If anything is unclear, the learners are allowed to ask the researcher to repeat the word. There is no time limit and learners may take their time to answer the questions. Learners are encouraged to guess if they are unsure of the meaning and the researcher does not overtly show if an answer is incorrect, but simply continues with the next word.

If a test subject makes one or no errors in the initial age-appropriate set it becomes his or her basal item set. If, however, the respondent makes more than two mistakes in the initial set the preceding, easier set is administered until only one or fewer mistakes are made in one 12 item set. If a test subject makes more than two mistakes in the first set of the series this set becomes the basal set by default. Once the basal set has been determined, further sets, in ascending levels of difficulty, are administered until eight or more mistakes are made in an item set. This then becomes the ceiling item set and the last item correctly identified by the participant is the ceiling item. Learners are unaware that the words are divided into sets and are likewise unaware that there is a threshold of eight incorrect words in one set (Dunn & Dunn, 2007). A learner's raw score is calculated by subtracting the number of mistakes made during the test from the ceiling item. The test is norm-referenced and the scoring is objective and quick. The test can be scored either by hand or by computer.

For the main study, Form A of the PPVT-IV was administered to all 69 learners individually and according to the test manual. The only amendment to the administration of the test the researcher made was that, during the pre-test, all learners were started at set 1 instead of determining the starting set in accordance with the age of the learner. This was done to save time, because during the pilot phase of the study it was discovered that the basal set for all pilot subjects was set 1 (refer Section 3.11.5 for a discussion on the results of the pilot study).

### **3.5.2 Observations**

In order to enrich and inform the findings of the PPVT-IV data (i.e. Research Question 1), the researcher gathered additional qualitative and quantitative data by observing the Grade 1 teachers and their classes as unobtrusively and naturally as possible. The researcher sat in the back of the classroom in order to minimize

reactive effects, such as the teacher and learners changing their behaviour because of the presence of the researcher. For this reason class observations were not sound or video recorded; instead the researcher made field notes (qualitative data) and filled in detailed observation sheets (refer Appendix 1). The format of the observation sheets enabled quantification of data. The researcher focused on recording the structure of the English lessons, the interaction between the learners and teachers during the English lessons, and the vocabulary teaching strategies.

Using observations to gather data was chosen because it allowed the researcher to directly observe the teaching practices the teachers used for vocabulary instruction and thereby get a better understanding of the functioning of the Grade 1 classrooms in this respect. Knowing the current practices in the study classrooms served to inform the main research question by providing context for teaching practices, teacher attitudes and teaching environments – all factors that could conceivably influence test results.

Taking the literature into account, the researcher drew up an observation sheet (refer Appendix 1) that was used to analyse and summarise the various teaching practices of the three teachers. The observation sheet focused specifically on the elements identified in the literature as effectively improving L2 vocabulary. These elements were also used as basis for the analysis of the observation data.

As stated above, the aim of the observations was to look at the vocabulary practices used by the teachers, and to ascertain whether or not the teachers read to their classes, and if so, whether their (storybook) reading was combined with vocabulary teaching. The kind of information sought from observations included answers to the following questions:

- Do the teachers read stories to their learners?
- How often do they read aloud to their learners?
- Is the reading accompanied by vocabulary teaching? If so, is the vocabulary instruction explicit or implied?

In addition, the CAPS document, as discussed in Chapter Two, was used to inform the observation sheet. The observation sheet was divided into four sections: Section A deals with general classroom management, Section B with general vocabulary teaching methods, Section C contains statements about storybook reading practices

and Section D deals specifically with vocabulary instruction *during* storybook reading sessions.

In addition to the observation sheet, the researcher also made detailed notes during the classroom observations; the researcher noted, for example, whether reading is used as a reward for good behaviour or work well done. It was the intention that the classroom observations would provide data concerning the existing vocabulary teaching practices and resources used in the various classrooms to inform any deductions made from the PPVT-IV quantitative data analysis.

The observations took place during the first term of the research year when the researcher spent six days over a two week period in each of the three Grade 1 classes. The teachers were asked to include a reading session and/or vocabulary lesson during at least one of the observation days. The teachers were aware that the researcher focused on vocabulary instruction and acquisition, but were asked to just “do what they usually do.”

In addition to the observations, further qualitative data were collected through teacher interviews.

### **3.5.3 Semi-structured interviews**

Interviews are a well-known and accepted method of collecting data for research studies (Babbie, 1995).

According to Patton (1990) and Fontana and Frey (1994:361), qualitative interviews can be classified into three basic types according to the degree of structure involved in the interview: structured, semi-structured and unstructured. The different types of interviews make this method of data collection very flexible and the researcher can adapt the interview to best suit the particular situation. Fontana and Frey (1994:373) write that the different types of interviews have diverse strengths and weaknesses and the researcher must choose which type to use according to the purpose of the research and the research questions.

In the structured interview a standard set of identical questions are asked of each participant, usually in the same order. This type of interview is still considered qualitative in nature because, although the questions are fixed, the participants' responses are still open-ended. In the unstructured interview the researcher asks

open-ended questions and encourages the participants to talk and to share their stories. In semi-structured interviews the questioning process is flexible, but covers a set of questions; the questions can be open-ended, but will still be directed towards the research topic. The flexibility of this structure allows the researcher to adapt the interview to the particular respondent and situation. The semi-structured interview is therefore one of the most popular interview forms in education research and is particularly popular with first time researchers (Fontana & Frey, 1994).

Dornyei (2007:136) states that the unstructured interview allows the researcher to interact with the subjects in a conversational atmosphere; it also gives the researcher the opportunity to ask further questions and for clarification if anything is unclear. However, the semi-structured interview is the most beneficial as it gives the respondents enough freedom to explore the topic, but at the same time, there is a degree of structure that focuses the interview, thus ensuring that the data is manageable and relevant.

For the above reasons the researcher decided that a semi-structured interview would be the best way to ask questions and gather quantitative data from the Experimental Group teacher regarding her L2 practices. The teacher from the Experimental Group was interviewed both before and after the intervention. The teachers from the two control groups were not interviewed by the researcher. The semi-structured interviews were an effective way to obtain the teacher's opinion and views regarding L2 teaching practices used in the Grade 1 classroom. The semi-structured interviews specifically focused on the teaching methods for vocabulary instruction in order to answer the second research question. The aim of the interview was to enquire about the teacher's L2 reading practices and specifically her L2 vocabulary teaching methods. The interviews made it possible for the researcher to gather additional data and to explore the teacher's views and opinions in a more informal and relaxed atmosphere. In the interviews the teacher was allowed to elaborate on the topic, to relate her own experiences and to give her own opinions.

The teacher was assured about the confidentiality of the data and that the information would only be used for the purposes of the study. Nevertheless, the respondent was reluctant for any recordings to be made, so the researcher took handwritten notes during the interviews. Each interview lasted about forty-five

minutes. The initial interview, before the intervention, was guided by the 18 open-ended questions set out in Appendix 2. The focus was on the vocabulary teaching methods of the teacher and more specifically whether she reads to the learners in their L2 and, if so, whether the reading was accompanied by either implicit or explicit vocabulary instruction.

Upon completion of the intervention, the researcher again conducted a semi-structured interview with the Experimental Group's teacher to explore various aspects of the intervention. The following questions were posed to the teacher:

- What did you think about the intervention? (In terms of content, ease of implementation, time allocation, overall results.)
- Do you think the intervention was useful? Please elaborate.
- Did the intervention influence your vocabulary teaching in any way? If so, in which way?
- Was there any specific technique you liked/learned/thought effective?
- Did the intervention, as a whole, change your opinion about the importance of vocabulary teaching as part of the curriculum?

It was intended that the interview data, together with the information gained from the classroom observations, should supply sufficient supporting data to assist in answering the second and third research questions and to supplement and support the quantitative data analysis results. The plan was, therefore, that this data would address the following question: What are the changes, if any, in the teacher's methods and approach to vocabulary instruction before and after the intervention?

### **3.6 QUALITY CRITERIA FOR RESEARCH**

Any form of scientific research has to be disciplined and meticulous. There is consensus amongst researchers (Babbie, 1995; Hughes, 2003; Dornyei, 2007) that certain quality criteria need to be applied in order for research to be considered legitimate. However, the terminology used to describe the quality criteria are often problematic (Dornyei, 2007). Quality criteria are best divided into concerns regarding reliability and validity, where validity relates to both measurement and research (Seliger & Shohamy, 1989:184).

### 3.6.1 Reliability

Reliability refers to the degree to which an assessment instrument produces stable and consistent results (Hughes, 2003:3). A research study is considered to meet the tests for reliability if other researchers can generate the same results using the same research instrument and methods under similar conditions (Babbie, 1995; Hughes, 2003).

As mentioned earlier in 3.5.1 the main research instrument, the PPVT-V has been proven to be both reliable and valid. Dunn and Dunn (2007:53) define reliability as 'the precision of scores, that is, the degree to which they are free of measurement error.' For the PPVT-V split-half reliability is high across the entire age and grade ranges, averaging .94 or .95 for each form; this is an indication of internal consistency reliability. The average test-retest correlation for the PPVT-V is .93 and indicates that the test is quite resistant to factors like fatigue, illness, differences in administration procedures or practise effects that might cause a learner to perform differently at different times (Dunn & Dunn, 2007). Therefore a separate reliability test for the context of this study was not deemed necessary.

During both the pre-tests and post-tests the researcher adhered closely to the instruction manual of the PPVT-IV on how to administer the test. In addition, the researcher did not influence the learners in any way during the assessments. The data were analysed in an unbiased manner (refer 3.9) and the results reflect the actual data obtained from the learners. The data from the PPVT-IV test are easily quantifiable and not open to subjective interpretation.

The qualitative data were obtained through interviews and observations and these data sets were analysed twice. This technique is called *regrounding* by Seliger and Shohamy (1989:186) and is a form of test-retest reliability. Regrounding involves the researcher going back to the data a second time and analysing the qualitative data a second time in order to confirm the themes and patterns observed the first time. Regrounding is used to enhance the reliability of data.

Although reliability is essential in any research study reliability alone is not sufficient — the research also needs to be valid. It is possible for a research study to be reliable but not valid (Hughes, 2003:50).

### **3.6.2 Measurement validity**

Validity indicates the degree to which a research study reflects the phenomenon which it claims to measure and refers to both the design and the methods of the research (Messick, 1996). Validity is therefore crucial to any research study. If the research instrument does not measure what it claims to measure, the results of the study are considered to be invalid. In other words, the results cannot be used to answer the research question(s) or to generalize the results and the study becomes useless and a waste of time and effort (Hughes, 2003).

Messick (1996:6) maintains that validity is not a property of the test itself, but of the meaning of the test scores. Validity refers therefore to the degree to which the conclusions made from a test are justified and accurate.

In this research study both qualitative and quantitative methods of obtaining data were used. The combination of these two methodologies allowed the researcher to form a more comprehensive picture of the research questions and, in the process, contribute towards the validity of the research (Seliger & Shohamy, 1989).

### **3.6.3 Research validity**

There are two main types of validity, namely internal validity and external validity (Brown, 1988:36). Internal validity refers to the validity of the instruments and the test itself. According to Seliger and Shohamy (1989:95) 'findings can be said to be internally invalid because they may have been affected by factors other than those thought to have caused them, or because the interpretation of the data by the researcher is not clearly supportable'. The main research instrument used in this research was the PPVT-IV and data from this test are easily quantifiable and not open to subjective interpretation.

External validity is concerned with the generalizability of the research — considerations of whether the research findings be generalized to a larger group or other contexts (Brown, 1988:40). Seliger and Shohamy (1989:95) state that 'findings can be said to be externally invalid because [they] cannot be extended or applied to contexts outside those in which the research took place'. There are a number of factors that can influence external validity. According to Dornyei (2007:53), an important factor is the sample size. If the sample size is not big enough, the results

of the research cannot be generalized to a broader population. In section 3.4.2 it is explained that, to compensate for small sample size and to build numbers, an external control group was added. There were consequently three groups of learners in the research study (as detailed earlier in 3.4.3 in this chapter).

Additionally, for the research to be valid it must be done under natural conditions. In other words, the data collection should take place in the usual context in which one would expect the interaction to take place. Lastly, for the research to be valid, the sample must be representative of the population to which the results can be generalized. In this research the sample population has the same characteristics as the wider population to which the research findings will be applied.

With regard to the use of the PPVT-IV, as stated in 3.5.1, the PPVT-IV has been proven to be valid and reliable, with reliability and validity coefficients in the range of .90. Assessments with a coefficient of .60 and above are considered acceptable and valid. The PPVT-IV is furthermore norm-referenced, standardized and easy to score.

In the light of the above arguments, it is the contention of the researcher that this research study is both reliable and valid.

### **3.7 THE INTERVENTION**

The research intervention took place for a period of two whole school terms. It consisted of interactive reading sessions for the Experimental Group every Tuesday and Friday morning. Each session lasted about 30 minutes and was done by the Experimental Group's class teacher (refer 3.7.4 for information on teacher training).

#### **3.7.1 Reading**

The interactive storybook reading sessions were a vital component of the intervention. The literature review in Chapter 2 demonstrates that reading to learners in their L2, even at a very young age, has the positive effect of not only improving their comprehension, but also expanding their vocabulary (Beck *et al.*, 1982; Justice *et al.*, 2005; Biemiller & Boote, 2006; Roberts, 2008). Research (Ard & Beverly, 2004; Beck & McKeown, 2007; Roberts, 2008) has found that the most effective way to read aloud to learners is with enthusiasm and to share enthusiasm for reading with the learners. This study aimed to do just that, to read to learners with enthusiasm and in this way to build learners' enthusiasm for reading. In addition, it is

important that the reader is a fluent and competent reader as the reader must become a model of what good reading sounds like. One of the goals of the intervention reading sessions was to make it a positive and likable experience for the learners, with the intention that it would lead to them having a positive attitude towards reading and in turn be more susceptible towards the L2 and vocabulary acquisition in the L2.

The first two reading sessions of the intervention were done by the researcher. Learners were eager and attentive during these sessions and consequently the researcher found the sessions relatively easy and the experience both enjoyable and rewarding. These sessions were performed by the researcher as it served as a practical demonstration for the teacher and formed part of the teacher training (refer 3.7.4). The researcher explained to the teacher exactly what the reading sessions should entail, and demonstrated this in the first two reading sessions. The vocabulary instruction methods that were used in the intervention, are discussed in detail in 3.7.3. The third reading session was done by the teacher under supervision of the researcher and thereafter, by the teacher on her own.

A few additional points must be taken into account. Firstly, the choice of reading material is vital (Lesaux *et al.*, 2010). It is important that the books are not too difficult for learners to understand, but at the same time also not too simplistic to prevent learners from becoming bored and losing interest. As stated earlier, it is important to read with fluency and it is therefore advisable to familiarize oneself with the reading material before reading it to the learners. Further, as was discovered during the pilot study (refer 3.11.5), it is important to make sure that the learners are physically comfortable when reading to them, as this will contribute to them sitting still and listening. Lastly, the reader must become a 'seller' of reading to the learners, s/he must be enthusiastic and animated; and must show the learners the wonderful treasures that are available in books (Ard & Beverly, 2004). The format and structure of the reading sessions will be discussed in more detail in 3.7.3.

### **3.7.2 Materials**

Choosing the reading material for the intervention proved more problematic than expected. However, after the pilot study (refer 3.11) the researcher had a better indication of the level and standard of the learners' English vocabulary. This, as well

as the fact that Grade 1 L2 vocabulary are mainly Tier 1 words and that concrete concepts with pictures are easier to learn, had to be taken into consideration when determining the storybooks that were to be used in the research (McKeown & Beck, 2011).

During the two reading sessions the researcher had with learners before the start of the intervention (refer 3.11.2) the researcher realised that the stories the Grade 1 learners could understand with their limited L2 vocabulary proved to be too one-dimensional and simplistic to sustain their interest. When this happened, learners started fidgeting and stopped paying attention to the reading. On the other hand, more advanced stories contained more challenging vocabulary which made it harder for learners to follow. The researcher had to find some compromise - stories that would be attention-grabbing without being too difficult for learners to understand. Another factor that had to be considered when choosing reading material was the frame of reference of the learners. It is important to try and find storybooks that the learners could identify with and find relevant and interesting. Also, after speaking with the teacher and doing the two reading sessions as part of the pilot study, the researcher realized that the Grade 1 learners of School A had very little exposure to stories and books.

One way in which the researcher tried to solve the problem of identifying suitable reading material was by using stories that might be familiar to learners. The researcher asked for the teacher's input and discussed the learners' frame of reference with her. Both the teacher and the researcher felt that the popular (and age old) stories that have universal appeal for children would be appropriate to use as reading material for the intervention. These included fairy tales with moral lessons like *The princess and the frog* and *Little Red Riding Hood*. Another factor that had to be kept in mind is that, as Dickinson and Smith (1994:112) note, the topic of a book is very important as it must not only be of interest to the learners, but must also generate discussions around and about the topic.

The difficulties in vocabulary comprehension were compensated for by translating and explaining the more difficult and unfamiliar words during the reading sessions. Each book chosen for the intervention also contained numerous big, colourful and fun illustrations. To further assist the teacher, and because the school had very few

resources, the researcher not only chose the reading material, but also supplied the teacher with copies of the books. Books that were read were, amongst others: *King Midas* (Al Perkins), *The Frog Princess* (Elizabeth Baker), *Little Red Riding Hood* (Candice Ransom), *The Adventures of the Busy Bears* (Poppy Welsh), *The Kiss that Missed* (David Melling), *Q Pootle 5 in Space* (Nick Butterworth), *Alley Dogs* (Lesley Rees), *The things I love about pets* (Trace Moroney), *The things I love about friends* (Trace Moroney) and *Cinderella* (Marcia Brown).

In addition, the researcher encouraged the teacher to expose the learners in the Experimental Group to additional literacy materials during the intervention. Some of the material (like the posters and flash cards) were provided by the researcher and others (like the worksheets) were drawn up by the teacher. The additional literacy material consisted of the following:

- Posters – Big, colourful and lively. One mathematical poster showing the various shapes in different colours, a poster of farm animals and a poster of fruit.
- Worksheets – Fun and stimulating activities containing the words and concepts discussed in the reading sessions to consolidate vocabulary learning.
- Big Books – A5 books consisting of big, vibrant pictures that prompt discussions and contain very little text.
- Flash Cards – depicting various animals, fruits and everyday objects.

These additional visual materials were mainly used as part of the follow up activities, after the storybook reading had taken place. Posters containing shapes, for instance, helped learners to identify abstract mathematical concepts by matching visual shapes and symbols with the vocabulary. In this way the follow-up activities incorporated different senses and this helped to reinforce vocabulary (Roberts, 2008).

### **3.7.3 Vocabulary instruction methods**

According to the CAPS document, Grade 1 learners must be exposed to their L2 (or 'first additional language,' FAL, as it is called by the South African Department of Education) for a minimum of two hours to a maximum of three hours per week. The Department of Basic Education suggests that of this time 1 hour 30 minutes must be

spent on listening and speaking and that learners are exposed to oral language in the form of stories, rhymes, poems, songs and oral instructions (Department of Basic Education, 2011a).

As described in Chapter 2, researchers have investigated various teaching strategies that are effective for vocabulary acquisition. The research revealed that vocabulary is best retained when storybook reading is accompanied by explicit and interactive vocabulary instruction (Hoffman *et al.*, 2014). Amongst the types of interactive practices that have proven to be most effective are, asking questions, expanding on the responses, explaining the vocabulary and responding not only verbally, but also with non-verbal signals (Ard & Beverly, 2004). These activities incorporate various senses and reinforce vocabulary (Roberts, 2008). For the intervention, the researcher made use of the extensive body of vocabulary acquisition research, focusing on explicit vocabulary learning strategies (refer 2.6) and storybook reading specifically (refer 2.6.3.) to draw up a framework for the interactive reading lessons with the Experimental Group. The researcher came to the conclusion that learners must not be passive listeners, but actively participate in discussing the characters, events, plot and vocabulary of the stories they listen to (Dickinson & Smith, 1994).

Reading lessons with the Experimental Group followed roughly the same framework. This framework involved recapping the previous story, introduction of the new story, a strategy check and reading of the new story (Dickinson & Smith, 1994:107). This was followed by post-reading exercises and follow-up activities. The guidelines for each of the stages are set out below:

- Recap the previous story

Start each reading session by welcoming the learners, enquiring how they are and giving a quick recap of the previous story. What do learners remember? Do they remember any particular character or event? What did they like about the characters and specific event? Try and engage learners in English conversation and incorporate the vocabulary of the previous story into this discussion.

- Introduce the new story

Look at the cover and title of the storybook. Ask learners what they think the story will be about. Explain that the cover of a book helps readers to understand what the

book is about. Look at some of the pictures in the book. Try to make predictions about the story. Look at the characters in the story. Discuss the characters before reading the story. E.g. How does the character look? Young? Happy? What are the colours of the character's hair/shoes?

- Before reading

Ask the learners to show where we begin to read on a page. Ensure learners know that in English we read from left to right and from the top of the page to the bottom. This seems obvious, but is still important as an initial reading strategy. Emphasize the fact that print and words carry meaning. Point to the picture of, for example, the animal and ask learners to name the animal in their home language. Then ask learners if they know what the animal is called in English. If not, give them the word in English and ask them to repeat it.

- During reading

Read the story once, concentrating on the story line. Explain difficult words and words that learners might be unfamiliar with. As stated previously, learners must be actively involved in the reading process. If the story, for instance, contains animals ask learners to give names to the animals e.g. Spotty as a name for the dog. Ask if learners have a cat or a dog as a pet and if so what are their names? If the story takes place at the beach, ask if they had ever been to the beach? What did they do at the beach? Did they enjoy it? In other words, engage learners as much as possible. If learners are unable to understand the questions, questions should be asked in the home language. Stories must be dramatized by using gestures and props. Ways in which non-verbal communication can be used will be to ask learners to show what they look like if they are angry/scared/happy. Read the story a second time, now the storyline is familiar to learners and the focus must be on the vocabulary. When encountering difficult vocabulary, like the words already explained during the first reading, ask learners if they know the meaning of the word. Can they name it in their home language? Show learners how to use contextual clues, like illustrations, to figure out the meaning themselves. Ask leading questions that will help guide learners. Unfamiliar words must be explained in a short and easy way and

thereafter learners are asked to repeat the word as well as to point, in the storybook, to the object or action. Oral vocabulary must be built with simple words like *hat*, *dog*, and *girl*. Learners must be able to identify and point to these object in the story.

- After reading

Close the book and ask learners to narrate the story. Praise the learners if they remember the story and the sequence of events as well as particular details of the story. Discuss the story with the learners. Ask learners which part of the story they enjoyed the most. Which part was the funniest? Which character did they like the most? And the least? Point out that there are no right or wrong answers and encourage them to express their opinion. Turn to any page in the story. Ask the learners to identify the character or the activity on that page, concentrating specifically on the vocabulary. For example: What do you see? Answer: A frog. What are the children building? Answer: A sand castle. Learners must be encouraged to answer only in English.

- Follow-up activities

After each reading lesson learners return to their workstations and are given a work sheet similar to the one in Figure 2. The teacher must explain to learners what is expected of them, at the same time emphasizing and drawing attention to the vocabulary contained in the lesson and repeated in the worksheets.

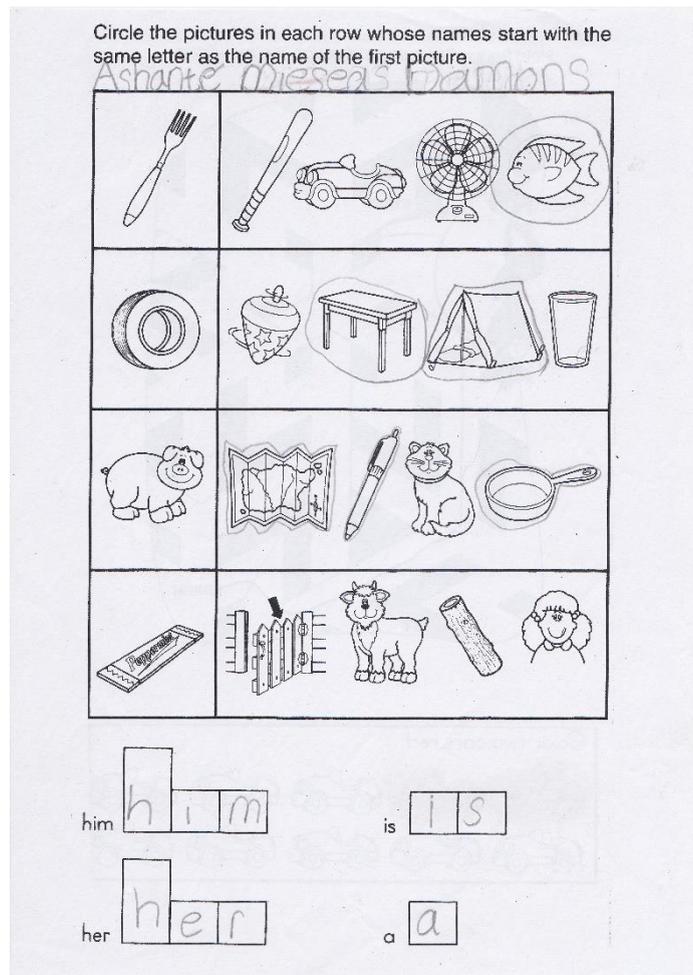


Figure 2: Example of learner's worksheet

While completing the worksheets, similar to Figure 2, learners listen to songs and rhymes. Learners are encouraged to make up rhymes or little stories of their own or to simply sing along. Ask learners to draw a picture about the main idea of the story. Posters and flash cards are also incorporated during these sessions. Learners are shown flash cards with illustrations of words and the target word written underneath. Learners are encouraged to 'read' the word, draw pictures of the words or for action words act out the word (Roberts, 2008).

In order to ensure that the Experimental Group teacher understood and could effectively apply the strategies in her classes during the intervention, the researcher conducted training sessions with her before the intervention.

### 3.7.4 Teacher training

Quality reading lessons are characterised by adult facilitation. According to Roberts (2008) for reading sessions to be effective the reader, in this case the class teacher,

must interweave questions and comments with the reading, creating interaction between the reader, learners and story. Dickinson and Smith (1994:107) assert that there are a number of strategies to facilitate vocabulary acquisition such as elaborating responses, questioning and labelling. The research findings by Roberts (2008) and Dickinson and Smith (1994) were used to inform the instructions given to the teacher and it was made clear that not only reading, but also interactive and explicit vocabulary instruction must take place.

As stated in a previous section, the researcher demonstrated the lesson format to the teacher during the first two reading sessions of the intervention. Beforehand the researcher had two separate instruction sessions with the teacher in which the structure and outcomes of the reading periods were discussed. Special focus was given to vocabulary teaching strategies. The guidelines for each stage of the reading session (as set out in 3.7.3) were explained in detail to the teacher. The structured format of the reading sessions made it easy to follow and implement. After each of the two reading sessions the teacher and researcher worked through the reading session and discussed the various strategies used by the researcher. Any questions by the teacher were discussed and addressed.

The third reading session was done by the teacher under supervision of the researcher. After this third reading session the researcher gave the teacher detailed feedback and suggestions as to how the reading sessions could be improved further, and confirmed her confidence in the teacher's ability to perform the intervention. All subsequent reading sessions were done by the teacher. However, the researcher remained available to the teacher for assistance and guidance throughout the intervention.

### **3.8 DATA COLLECTION PROCEDURE**

As noted in 3.2, the research study collected both quantitative and qualitative data. Quantitative data were collected from three groups; a control and experimental group from the research school and an external control group from a second school. Qualitative and qualitative data were collected in the form of classroom observations. The observation sheets allowed for the quantification of data while the researcher's notes are in the form of qualitative data. Additional, qualitative data were gathered by doing semi-structured interviews with the participating teacher.

Quantitative data were collected by making use of the PPVT-IV (refer 3.5.1). It was important to obtain a baseline score for both the experimental and the control groups in order to assess whether the intervention had an impact on learners' vocabulary acquisition. In the case of the Experimental Group, the effects of the storybook reading and explicit vocabulary instruction in the intervention were assessed after the intervention period.

The researcher administered the PPVT-IV herself for both the pre-test and post-test learners in the experimental and control groups. Learners were taken out of the class and tested individually. Arrangements were made with the teachers for a convenient time in order not to disrupt the normal teaching day. The test was administered verbally and took on average about twenty minutes per learner to complete. The researcher scored the test result of each learner manually, according to the PPVT-IV manual. As stated earlier, one of the advantages of the PPVT-IV is that it is both easy and quick to administer and score (Dunn & Dunn, 2007).

Qualitative data regarding vocabulary teaching practices were collected through classroom observations (refer 3.5.2) of both control group classrooms and the experimental group classroom before the intervention. An observation sheet was used for the observations (refer Research instruments, Section 3.5.2), but the researcher also found it necessary to take notes (qualitative data) during the observation periods.

Further qualitative data were collected from a semi-structured interview (refer 3.5.3) with the Experimental Group teacher both before and after the intervention. The researcher initially wanted to record the interviews, but the teacher was reluctant so it was decided that the researcher would take notes during the interviews.

### **3.9 DATA ANALYSIS**

After the data had been collected, the next step in the research process was to analyse the data. The data analysis process was divided into two parts, based on the fact that both quantitative and qualitative data were collected. An explanation of the analysis of the quantitative data will be followed by an account of the analysis of the qualitative data.

### 3.9.1 Analysis of quantitative data

The quantitative research provided multiple data sets that had to be analyzed, interpreted and compared. Both descriptive and inferential statistics were used to analyze the results of the PPVT-IV. According to Dornyei (2007) descriptive analysis is used to summarize and describe the data, while inferential statistics is used to determine whether the observed differences in scores can be generalized to the entire population. The Statistical Package for Social Science (SPSS), Version 23, was used to perform quantitative data analysis on the subjects' pre- and post-scores in order to answer the first research question. The data sets were examined in terms of within-group and between-groups comparisons.

Inferential statistics were used to compare the pre-test scores of the groups to determine if the groups were in fact homogeneous before the intervention began. T-tests were used to compare the pre- and post-test scores of each group to determine if any within-group improvements had taken place. The most important analysis in terms of Research Question 1 was the comparisons of the groups' post-test scores. After the intervention, the post-test scores of the groups were computed to determine if there was a significant difference between the two control groups and the Experimental Group (Dornyei, 2007), and between the Experimental Group's pre-test and post-test scores.

To determine whether the differences in mean scores were significant, the statistical test analysis of variance (ANOVA), a statistical method used to test differences between two or more means, was used to mathematically determine the probability that the difference between scores was due to chance. The purpose of inferential statistics is to determine if the difference between two or more groups is significant enough to be meaningful. Significance is measured by using a probability coefficient, displayed as  $p$  values. Ideally, a low probability—less than 5 in 100—is preferred in human sciences research as this implies that the probability that the results were due to chance is less than 5 in 100. The  $p$  value ranges between 0 and 1; for statistical significance the  $p$ -value must be less than 5 in 100 ( $p < 0.05$ ) (Dornyei, 2007).

If a significant  $p$ -value is obtained, a more detailed analysis of the differences between the means of the groups will have to be done. The ANOVA would simply

indicate that there is a significant difference between the means, but because there were three groups a post *hoc* test, Least Significant Difference (LSD) was computed to determine which of the means were significantly different from each other (Dornyei, 2007).

Where differences (if any) were found to be statistically significant an effect size test was done in order to determine whether the statistical differences are not only significant, but also important (Olejnik & Algina, 2000:241). One reason why Olejnik and Algina (2000:241) advocate the use of an effect size test is that small differences can be statistically significant if the sample size is large enough. Olejnik and Algina (2000:241) continue that researchers need to be able to determine whether the interventions effect is small, medium or large. The researcher decided to use Cohen's *d*, an effect size analysis, to measure the meaningfulness of the intervention. Cohen's *d* (refer Tables 22 and 23) was performed on the three groups' PPVT-IV results to compare the differences (if any) in the learners' scores before and after the intervention.

### **3.9.2 Analysis of qualitative data**

Turning to analysis of the qualitative data, Babbie (1995:26) states the analysis of qualitative data involves organising the data into categories and according to themes. The researcher summarised the data from the observation sheets in table format and analysed the content according to the broad categories mentioned earlier in this chapter, namely classroom management, general vocabulary instruction, storybook reading and vocabulary instruction during storybook reading. Interviews were transcribed and served to inform the observation data and conclusions drawn from the PPVT results.

The results of the data analyses will be presented in Chapter 4 but, before the data are deliberated, the ethical considerations and pilot study will first be discussed in the next sections.

### **3.10 ETHICAL CONSIDERATIONS**

Researchers must be aware of ethical implications when doing research. Ethical issues are especially a concern when the research involves people and even more so when the participants are young children or other groups that are considered to

be vulnerable (Fontana & Frey, 1994). Since this study involved Grade 1 learners, careful consideration had to be given to the ethical issues of the study.

Ethical concerns usually centre around three issues: that of informed consent, the right to privacy and protection from harm (Fontana & Frey, 1994). During this research all efforts were made to address all three these issues and to conduct the study in an ethical manner. All participants in the study were truthfully informed about the research. All participants' confidentiality and anonymity was guaranteed as the researcher made use of a numbering system for the learners and pseudonyms for the teachers. The research data were stored safely and securely by the researcher and remains confidential. The dignity and well-being of the learners were protected throughout the study. Learners and teachers were treated with respect during the research process and the researcher ensured that the learners were not exposed to any negative or damaging experiences.

Before the start of the study the researcher received an ethical clearance letter from the university (refer Appendix 3) giving the researcher the necessary permission to conduct a research study. Next, the researcher applied for and received written consent from the Western Cape Department of Education to conduct the research (refer Appendix 4). Once the necessary approval had been received from the Department of Education, the researcher approached the principals of the two schools which were earmarked for the research. Appointments were made with the principals to discuss the research study, to address their concerns and to assure them of the confidentiality of the research and the research results. Both principals were satisfied that the research would take place in a professional and ethical manner and agreed that the research could take place at their schools. Written consent was obtained from both principals. Refer to Appendix 5 for a copy of the letter sent to the principals.

The principals referred the researcher to the three Grade 1 teachers who would form part of the research. After the research was explained to the teachers they signed an informed consent form (Appendix 6), indicating they would be willing to take part in the research.

Once the approval and co-operation of the teachers were ensured, the researcher could approach the learners and, indirectly, their parents/guardians. The research

was explained to the learners in Afrikaans and they verbally agreed to participate. It was also explained to them that the study was voluntary and they could withdraw from the research at any point. In addition, an Assent Form was read to the learners and they were asked to sign the form indicating that they understood what was said and that they were happy to take part in the research (refer Appendix 8). All the learners signed the form, however, since the participants were Grade 1 learners and therefore still minors, a letter explaining the nature of the study, as well as an informed consent form, were sent to their parents or guardians (refer Appendix 7). Since most parents are Afrikaans speaking, the consent forms were translated into Afrikaans. All participating learners' parents gave permission for their children to participate in the study and returned the signed informed consent forms. The informed consent forms for the parents and the learners' Assent Forms were made available in both English and Afrikaans.

Once all the ethical requirements had been met, the researcher was able to start with the data collection process for both the pilot study and the main study. In order to test the research instruments and data gathering procedures, a small pilot study was conducted first.

### **3.11 THE PILOT STUDY**

A pilot study is a mini version of a research study, performed as a trial run to test the feasibility of the study and to pre-test some of the underlying assumptions of the research design. It mainly serves to pre-test research instruments, such as questionnaires and interview schedules (Polit, Beck & Hungler, 2001). In this way a pilot study gives researchers the opportunity to try out the research techniques, instruments and methods and identify any practical problems that may have been overlooked in the planning process. If necessary, the actual research study can then be adapted and modified using the information gained from the pilot study. Although a pilot study is of value to a research project, a successful pilot study does not guarantee the success of the full scale research. It does however, contribute to the likelihood of a successful study (Blaxter, Hughes & Tight, 1996).

The value and results of the pilot study will be discussed in the next section.

### 3.11.1 The value of a pilot study

Different authors stress the importance and value of pilot studies. In this respect, Blaxter *et al.* (1996:122) advise that:

*You may think that you know well enough what you are doing, but the value of pilot research cannot be overestimated. Things never work quite the way you envisage, even if you have done many things before, and they have a nasty habit of turning out very different than you expected.*

Pilot studies have a number of benefits (Welman & Kruger, 2001). Firstly, a pilot study assists in detecting any unclear or ambiguous items on a questionnaire. This research made use of the PPVT-IV test for the pre- and post-test and, although this test is used extensively throughout the English speaking world, it was still necessary for the researcher to make sure that the young learners taking part in this research were able to understand the items and follow the instructions of the test. It was also necessary to determine whether the test's recommended starting point (as determined by the learner's age) could be directly applied to this study. Secondly, a pilot study can help the researcher detect possible flaws in measurement procedures. For this study practical procedures, such as the time required for each learner to complete the PPVT-IV, had to be piloted. Lastly, a pilot study will provide information that indicates whether the participants experience any embarrassment or discomfort during the research. During this pilot study the researcher was able to monitor the non-verbal behaviour of participants to see if there was anything in the content or wording of the research instruments that made them uncomfortable (Welman & Kruger, 2001).

Other advantages of pilot studies are that it might give advance warning about where the main research project could fail, it collects preliminary data, and assists in assessing the feasibility of and further development of the research questions (Van Teijlingen & Hundley, 2001).

Taking the above into consideration, as well as the fact that the researcher had not conducted any previous research, a pilot study was designed and undertaken before the formal study was carried out. It was felt that the pilot study would contribute to the overall success of the main study and prevent the researcher from wasting time,

money and effort. In addition, the pilot study would give valuable feedback regarding the research instrument and procedures.

### **3.11.2 Aims of the pilot study**

For this research study the pilot study was the first phase in the practical testing of the effect of L2 storybook reading and interactive vocabulary instruction on the vocabulary acquisition of Grade 1 learners.

The main aims of the pilot study were to test the data collection instrument, the PPVT-IV, and to enable the researcher to familiarize herself with the test and the technical requirements surrounding administering the test, to identify any practical problems which might occur during the research, and to determine the time taken for administering the PPVT-IV. At the same time the researcher could familiarize herself with the different elements of the research procedure in preparation for the main study. The ultimate objective of the pilot study was to ensure that the research instruments could be used properly and that the information obtained would be as correct and valid as possible.

Although the researcher is familiar with vocabulary learning strategies and storybook reading methods, it was still deemed prudent for the researcher to have an interactive reading session with the Grade 1 learners before the start of the intervention. In addition to testing the PPVT-IV, the pilot study therefore also involved two sessions with the whole class, in which the researcher read to the learners.

### **3.11.3 Participants**

For this study a pilot study was done during the last term of the year preceding the year of the main study. The PPVT-IV was administered to six Grade 1 learners from School A. These six learners were promoted to Grade 2 in the following year (the year of the main study) and were consequently not involved in the main study. As stated earlier, one of the aims of the pilot study was to examine the practical issues around the PPVT-IV testing of learners. Issues such as where the testing would take place, whether the researcher would have free access to the classroom, whether the learners would be willing to take part in the testing process and how long would each assessment take, had to be considered.

The two schools identified to take part in the main research study were discussed in 3.4.2. The school where the pilot study was conducted was school A, which is the school where the main study's intervention took place. The pilot study took place towards the end of the year and, despite it being an important and busy term, the Principal of School A gave permission that a Grade 1 class could participate in the pilot study. The condition set by the Principal was that the research must not interfere with the normal classroom teaching practices and/or the end of the year assessments.

Six L2 English speaking learners from the 2014 Grade 1 class took part in the pilot study. The researcher asked the teacher to supply her with the names of all the learners in the class in alphabetical order and then randomly selected two names from the top, the middle and the end of the list. The ages of the learners ranged from 6 years and 10 months to 8 years and 6 months.

A letter was sent to each of the learners' parents informing them of the test and asking them to sign an informed consent form and return it to the school. Five learners returned the consent forms, so the researcher had to pick another name from the list. The pilot study commenced after consent forms were received for six learners.

The PPVT-IV test was administered to the learners individually, according to the instructions of the manual and in the same way it would be done in the main study. For convenience, it was decided that the researcher would work from a table and two chairs set up on the veranda outside the Grade 1 classroom.

#### **3.11.4 Research instrument**

Two of the main aims of the pilot study were to familiarize the researcher with the PPVT-IV and to look at the practical implications of conducting research with Grade 1 learners. Accordingly, the main research instrument of the study, the PPVT-IV, was used in the pilot study. The PPVT-IV is discussed fully in 3.5.1 under the section dealing with the research instruments. For the pilot study Form A of the PPVT-IV was used to assess the receptive vocabulary of the six participants. Testing began with a set according to the age of the learner and continued until a learner got 8 or more answers wrong in one set.

### 3.11.5 Analysis of the pilot study

The pilot study results of the six L2 English speaking learners from the 2014 Grade 1 class are displayed in Table 5.

Table 5: Pilot study mean raw scores

Treatment Groups	N	Mean	Std. Dev
Pilot study	6	34.92	10.24

The mean raw score of the subjects is 34.92, which is relatively low (Dunn & Dunn, 2007). The standard deviation of the group is displayed in the fourth column of Table 5. The purpose of the standard deviation is to indicate how varied or uniform the PPVT-IV scores are (refer Section 4.2.1.3 for a full discussion of standard deviation). As can be seen from Table 5 the standard deviation is 10.24, indicating that the data points are spread out over a wide range of values (Landau & Everitt, 2004).

Although the results of the pilot study are valuable, the main aims of the pilot study, as identified earlier, were to familiarize the researcher with the PPVT-IV test and the technical requirements surrounding the administration of this test. The impact of the pilot study on the research study are detailed in the section below.

### 3.11.6 Lessons learnt from the pilot study

The pilot study alerted the researcher to three important issues—firstly, the time allocated for testing; secondly, the effect of the physical environment on testing; and, thirdly, the level of vocabulary knowledge of the learners selected to participate in the research. These issues are discussed below.

- Testing time

The estimated time required to answer the test was adjusted from ten to twenty minutes because the whole testing process took longer than anticipated. The Grade 1 learners were shy and the testing situation was foreign to them. Accordingly, they were initially hesitant and sometimes even reluctant to point to an answer. The researcher noticed that this happened especially if they were unsure of the answer and 'afraid' of pointing to the wrong answer. As a consequence it took time for the researcher to encourage them that it was 'okay' to guess even if it is wrong. In order

to allow them to settle and become comfortable the researcher, for instance, asked them to write down their own name on the PPVT-IV sheet (this took time). Afterwards the researcher would praise the learner on his/her handwriting and ask a question about their grade/school/family/friends/likes etc. before explaining the testing process to the learners in simplistic, friendly terms. Two training image plates were used to familiarise learners with the process before the actual testing started and this again gave the researcher an opportunity to interact with the learner. By this time the learners would usually be relaxed enough for the actual testing to begin and, although learners still needed some reassurance now and again, the researcher was satisfied that the pilot testing was done successfully.

The pilot study also revealed that, although straightforward, the administration on the PPVT-IV is tiring. The researcher therefore decided to extend the number of days initially set aside for the administration of the test. This was done in order to prevent the researcher becoming fatigued during the course of the research, which, in turn, affects the way that observations are recorded and can threaten the internal validity of the research.

- Testing environment/venue

The researcher became aware of the fact that the physical environment of the research has an influence on the data collection process. The administration of the PPVT-IV on the veranda outside the classroom for the pilot study proved to be less than ideal as learners were easily distracted by what was going on around them. During break times other learners were disruptive and inquisitive and the testing session had to be paused until everyone went back to their classrooms again. It became clear that the testing environment would have to be changed for the main study. The researcher discussed this with the various teachers and they were all very accommodating. Accordingly, arrangements were made for the researcher to do the research testing in the school hall in School A and in an empty classroom in School B. Both venues were quiet and well-lit and away from any distractions and inquisitive fellow learners. The researcher had a table and two chairs at her disposal and both the learners and the researcher were comfortable during the testing sessions.

- Recommended starting age for test

Standard procedure for administering the PPVT-IV requires that the researcher takes the age of the subject into consideration, as this determines the image plate with which the test must start. This is done to limit the number of items that are either too difficult or too easy and which could lead to boredom and frustration (Dunn & Dunn, 2007). During the pilot study the researcher realised that the participants' level of vocabulary was very low. Time was wasted by administering the recommended age-determined image plate first, because it consistently proved to be too difficult for the pilot study learners, and could therefore not be used as the basal set for the participants. A succession of earlier sets then had to be administered to find the basal set for the learner. This was not only time consuming, but also demotivating for the pilot study participants. The researcher therefore decided to ignore the suggested starting age and, for the main study, to start the PPVT-IV with set 1 for all participants.

Apart from the abovementioned points of improvement, the pilot study was deemed to be successful. The learners coped well during the administration of the test and, although there was some initial shyness, there was no confusion regarding the answering of questions. The researcher was able to administer and score the PPVT-IV with ease and became confident in the use of the instrument.

### **3.12 CONCLUSION**

Chapter Three has given a description of the methodology used to conduct the present research study. A mixed methods approach, combining both quantitative and qualitative methods of research, was used. The methodology of the research pilot phase and the main study was discussed in detail.

In the next chapter (Chapter 4) the analysis of the data collected from the PPVT-IV pre- and post-tests, the classroom observations and the interviews with the teacher will be presented and discussed in detail.

## **CHAPTER 4**

### **DISCUSSION OF FINDINGS**

#### **4.1 INTRODUCTION**

Vocabulary development is positively associated with reading development, reading comprehension and academic achievement (refer 2.2). In light of the importance of vocabulary the current study aims to investigate effective L2 vocabulary instruction and teaching strategies. The Curriculum and Assessment Policy Statement (CAPS) document states that “[w]e know from research that children’s vocabulary is heavily dependent on the amount of reading they do” (Department of Basic Education, 2011a:12). Accordingly, the L2 vocabulary instruction in this study took the form of planned, explicit and interactive vocabulary teaching in the context of storybook reading. The purpose of the vocabulary teaching strategies was to determine whether storybook reading has a positive effect on the vocabulary acquisition of the learners. In addition, the study aimed to identify the pedagogical practices and vocabulary teaching strategies used by Grade 1 teachers when teaching specifically vocabulary during English language lessons. The actual vocabulary teaching practices used by the teachers in their respective classrooms were observed during the study. These study aims, in turn, gave rise to the following research questions, with Research Question 1 being the primary research question:

- How does second language storybook reading, accompanied by explicit, interactive vocabulary instruction, impact on the vocabulary acquisition of Grade 1 learners?
- What are the existing vocabulary instruction practices in the participating Grade 1 classes?
- What are the changes, if any, in the Experimental Group Teacher’s attitude and approach to vocabulary instruction before and after the intervention?

To attempt to answer the three research questions, the research study was conducted in three phases:

- Phase 1: the pre-intervention phase,
- Phase 2: the intervention phase,
- Phase 3: the post-intervention phase.

In Chapter Four the different analyses that were applied to the research data will be described. In addition, it contains a discussion of the research findings. These findings relate to the research questions which informed the study and endeavour to test the research hypothesis and answer the three research questions.

The analyses and interpretation of the findings are presented in two parts. Firstly, the data gathered during the pre-intervention phase (by means of the PPVT-IV pre-tests, classroom observations and teacher interview) were studied to establish the *status quo* before the intervention. Quantitative data analysis was done on the PPVT-IV assessment scores and quantitative and qualitative data analyses were used to analyse the data from the classroom observations (in the form of the observation sheets and supplemented by the researcher's notes) and the Experiential Group teacher's interview. The second part of the data analysis took place after the intervention in the form of an analysis of the post-intervention PPVT-IV assessment scores and comparing these results with the results from the pre-tests. Qualitative data, in the form of a post-intervention interview with the Experiential Group's teacher were also analysed. The results of the different analyses do, however, support and complement each other and provide a more detailed insight in answering the research questions. The second phase consisting of the intervention itself (refer 3.7) did not entail any data analysis.

#### **4.2 DISCUSSION OF PHASE 1 – PRE-INTERVENTION**

A set of mathematical procedures or 'statistics' was used to analyse the quantitative data. Statistics can be divided into two main branches, namely descriptive and inferential statistics. Descriptive statistics are used to describe and summarize numerical data (Nunan, 1992). Data are reported in tables and figures and include descriptions about the mean, median, mode, range (minimum and maximum values), variance and standard deviation of the results. In this way, large amounts of data are simplified. However, descriptive statistics only allow the researcher to draw conclusions about the sample. In order to establish if the results of the sample are significant and powerful enough to generalize to the whole population, inferential statistics need to be computed (Dornyei, 2007).

In addition to statistically testing the results of the PPVT-IV tests, additional quantitative data, collected from the observation sheets and qualitative data from the

researcher's notes and pre-intervention interview, were also analysed. The analyses of the observations and semi-structured interview served to supplement the findings of the PPVT-IV tests and inform both Research Questions 2 and 3 regarding the approach to vocabulary teaching practices used in the three classrooms.

#### **4.2.1 Pre-intervention learners - quantitative data**

The aim of the quantitative data gathered in Phase 1 was to obtain basic, independent, measurable data about the L2 receptive vocabulary abilities of participating learners before the start of the intervention. The main function of the quantitative data was to:

1. Provide a credible base of information about learners' abilities from which to make reasonable deductions after the analysis of qualitative data, and
2. To compare with the quantitative data gathered in Phase 3/final phase to show the effect (if any) of the intervention on the L2 vocabulary acquisition of the participants.

##### **4.2.1.1 The Peabody Picture Vocabulary Test, Fourth Edition**

Quantitative data were gathered using the Peabody Picture Vocabulary Test, Fourth Edition (refer Section 3.5.1 for a full description of the test). The PPV-IV measures the understanding of receptive vocabulary in standard American English and is therefore a suitable instrument to assess vocabulary acquisition (Dunn & Dunn, 2007). Even though standard American English is used in the test, it is sensitive to other cultures and the items were analysed for fairness in terms of socio-economic status, sex, race and geographical area (Dunn & Dunn, 2007). The Peabody Picture Vocabulary Test, Fourth Edition (PPVT-IV) is administered verbally. The researcher states a stimulus word while learners look at an image plate containing four images. Learners then point at the correct image. Participants have to neither read nor write, making the test ideal for young, Grade 1 learners. The test is divided into 12 item sets, but learners are unaware of this. The researcher determines each learner's basal and ceiling set according to the number of mistakes s/he makes (refer Section 3.5.1 for detail). The PPVT-IV is norm-referenced and the scoring method is explained fully in the test manual. A learner's raw score is calculated by subtracting the number of mistakes s/he made from his or her ceiling item (the last item correctly

identified) (Dunn & Dunn, 2007). The scores obtained from the PPTV-IV can then be used to determine whether the vocabulary functioning level of the participant is in the high/average/low range. Scores can also be converted to a percentile rank. However, for the purposes of this study, the researcher was mainly interested in comparing the pre- and post- raw scores of Grade 1 L2 learners to try and establish whether interactive vocabulary instruction would have any (positive) effect on the growth of their L2 vocabulary.

#### **4.2.1.2 Number of participants**

The first step in the quantitative data gathering process was obtaining baseline data from all the participants. Baseline data were collected before the start of the intervention in the form of the PPVT-IV scores. The participants in the study were Grade 1 English L2 learners from two separate, but closely located, schools - School A and School B, with learner ages ranging from 5:10 (5 years and 10 months) to 8:2 (8 years and 2 months). (Refer Sections 3.4.2 and 3.4.3 in Chapter 3 for a full description of the schools and learners.) Learners were distributed into three groups. There were two groups in School A, the Experimental Group and Control Group A. School A is a small, rural school with 26 learners in the Experimental Group and 25 in Control Group A. ( $N = 51$ ). However, in order to increase the number of participants, but more importantly, to allow for the effects of a higher percentile and better resourced school on learners' vocabulary acquisition without an intervention, it was decided to include an external control group from a different school in the form of Control Group B from School B. School B is situated within 5 km from School A, but serves a middle-class community and is better resourced (refer Section 3.4.2 for details). There were 18 Grade 1 learners in Control Group B; this brought the total number of learners who took part in the research study to 69 ( $N = 69$ ). This was done because as discussed in 3.6.3 sample size is a determining factor in research validity (Dornyei, 2007:53). If a sample size is too small research results cannot be generalized to a broader population. Refer Table 6 for a summary of the number of cases in each class group or data set. The number of participants in each class group is recorded under the column labelled *N*.

Table 6: Sample size of the three groups

Treatment Groups	<i>N</i>
Experimental Group	26
Control Group A	25
Control Group B	18
TOTAL	69

#### 4.2.1.3 Mean and Standard Deviation

Generally the first step in quantitative data analysis is to perform descriptive statistics in order to summarize the general tendencies of the data collected. Table 7 summarizes the descriptive statistics for the pre-test scores of the three groups. The data for the pre-test are described in terms of average score (*Mean*) and variability (*Standard Deviation*).

Table 7: Pre-test mean raw scores

Treatment Groups	<i>N</i>	Mean	Std. Dev
Experimental Group	26	21.15	9.39
Control Group A	25	19.20	7.64
Control Group B	18	24.83	6.92

The average (*Mean*) of the pre-test scores of the Experimental Group was 21.15; Control Group A had the lowest pre-test mean score of 19.20 and Control Group B had a pre-test mean score of 24.83. The mean scores indicate that, on average, Control Group B, from School B, performed slightly better than the two groups from School A before the intervention. Control Group A's average score is the lowest, indicating that this group's average performance was the poorest of the three groups.

The standard deviation of the three groups is described in the fourth column of Table 7. Standard deviation gives an indication of the amount of variation of the PPVT-IV assessment scores. A standard deviation of close to 0 indicates that the data points are close to the mean, while a high standard deviation indicates that the data points are spread out over a wider range of values. The more the data points differ from

the mean, the larger the standard deviation will be (Landau & Everitt, 2004). The purpose of the standard deviation is, therefore, to indicate how varied or uniform the PPVT-IV scores of each group is. As can be seen from Table 7 the Experimental Group had the biggest standard deviation, (9.39) while the variation on the PPVT-IV assessment scores for Control Groups A and B was more uniform with standard deviations of 7.64 and 6.92 respectively.

Results from the pre-tests revealed that learners in all three groups in general, had a very limited English vocabulary. In fact, learners demonstrated English receptive vocabulary comparable to very young L1 English-speaking children. All three groups' age equivalents were in fact well below the chronological age for which the PPVT-V is normed (Dunn & Dunn, 2007).

In addition to describing the means and standard deviation of the groups it is also important to look at the relationship of the three groups before the start of the intervention. As mentioned in the descriptive statistics in Table 7, the pre-test mean scores of the three groups were close together — the pre-test score for the Experimental Group was 21, for Control Group A it was 19, and for Control Group B it was 25.

#### **4.2.1.4 Statistical significance**

A one-way analysis of variance (ANOVA) with a post-hoc Least Significant Difference (LSD) for multiple comparisons was computed to determine the relationship between the mean pre-test raw scores of the three groups in order to establish if the groups were homogenous before the intervention. If it can be established that the three groups were similar in their receptive vocabulary abilities before the intervention it might be reasonably deduced that any differences in their abilities after the intervention could be attributed to the effect of the intervention. An ANOVA test can compare the mean scores of two or more groups, by measuring the probability coefficient or  $p$  values, while the second step of the test the Least Significant Difference (LSD) gives a breakdown of the contrasts ( $p$  values) between specific groups (Dornyei, 2007:219). The  $p$  value can range from 0 to +1; a  $p$  value of  $p = .25$  means that 25% of the obtained results may be due to chance (Dornyei, 2007). In social sciences a  $p$  value of .05 ( $p = .05$ ) or less ( $p < .05$ ) is considered significant, in other words, the probability that the results are due to chance is less

than 5 % (Landau & Everitt, 2004). Consequently a  $p$  value of more than .05 ( $p > .05$ ) will indicate that the results (in this case the difference in mean scores between the groups' pre-tests scores of the PPVT-IV) are insignificant and that the groups were homogenous at the beginning of the research.

The results of the LSD test and the ensuing  $p$  values are displayed in Table 8.

Table 8:  $p$  values of pre-test groups

1 <sup>st</sup> Mean	2 <sup>nd</sup> Mean	Mean Differ.	$p$ value
Experimental Group	Control Group A	1.95	0.56
Experimental Group	Control Group B	-3.68	0.32
Control Group A	Control Group B	-5.63	0.13

The comparison between the Experimental Group and Control Group A resulted in a  $p$  value of  $p = .56$  indicating that there was no significant difference between the two class groups in School A. The researcher expected this outcome since the learners in School A are relatively homogenous as they come from the same rural, socio-economic community, and new Grade 1 learners are divided into two classes on a first come first served basis (i.e. completely randomly) (refer 3.4.3). As a result there should be no significant difference in the mean scores of their L2 vocabulary (or any other) ability.

The comparison of the pre-test scores for the Experimental Group and Control Group B resulted in a  $p$  value of  $p = .32$ . This value again indicates that there was no significant difference between these two groups before the intervention, even though the class groups were in different schools.

The same result was achieved with the last calculation - the comparison of the pre-test scores between Control Group A and Control Group B which resulted in a  $p$  value of  $p = .13$ ; indicating no significant difference between the internal and external control groups.

#### **4.2.1.5 Conclusion**

The above analyses illustrate that the difference in the mean raw scores between all three groups was not statistically significant. The English vocabulary abilities of the

three groups were therefore similar at the beginning of the research study, before the intervention.

#### **4.2.2 Pre-intervention classroom observations - quantitative and qualitative data**

Quantitative and qualitative data were collected by means of classroom observations and an interview with the Experimental Group teacher. This was done in order to obtain supporting information regarding the vocabulary instruction practices used in the three classrooms, with the aim of answering Research Question 2 and thereby enhancing any conclusions drawn from the quantitative test results. The data also served to inform Research Question 3 regarding the Experimental Group teacher's approach to vocabulary instruction. Overall, data collected from the classroom observations were used to better substantiate any conclusions at the end of the study.

The Experimental Group, Control Group A and Control Group B, as well as their respective teachers, were observed during the first half of the research year. As mentioned previously (refer 3.4.4), the teachers involved in the study were Afrikaans speaking and female, with the length of their teaching experience ranging from seven to twenty-six years. Detailed biographical information regarding the teachers are set out in Table 4.

Each class group was observed for three consecutive days (Wednesday, Thursday and Friday) over the course of two successive weeks, resulting in 18 days of observation data. Observations included both content subject and language lessons with the main focus being on the Additional Language (English) teaching and learning strategies.

The detailed observation sheet (refer Appendix 1), drawn up by the researcher, focused specifically on the vocabulary teaching practices and methods used by the three teachers observed. However, since many interesting and relevant aspects occur during day-to-day classroom activities that are not necessarily covered by the formal observation sheet, the researcher also made detailed notes during the observation period. The classroom observations gave the researcher insight into a typical school day, but more importantly for the aims of this research, into existing

vocabulary instruction practices as well as the general nature and structure of English language lessons at the chosen research sites. An example of a section of a completed observation sheet, as well as the researcher's notes, can be seen in Appendix 9.

The categorisation of the data from both the observation sheets and the researcher's notes was informed by the literature review, and specifically vocabulary teaching concepts and principles which, according to existing research, enhance effective vocabulary instruction. The observation sheet data were analysed and discussed according to the observation sheet sections (refer 3.5.2 & Appendix 1), namely (1) classroom management (4.2.2.1), (2) AL teaching practices, including general vocabulary instruction (4.2.2.2 – 4.2.2.10), (3) storybook reading (4.2.2.11), and (4) vocabulary instruction during storybook reading (4.2.2.12). The discussion will be supplemented by summaries of the applicable observation sheet data in table form.

#### **4.2.2.1 Classroom management**

In all three classrooms the English lessons occurred in group settings, with all the learners participating in the same activity at the same time. Often teachers would sit on a chair while learners were seated in front of the teacher on the carpet. Lessons in Control Group B often started with a greeting in English. Teacher CB would say: "Good morning" and learners would chorus back "Good morning". Teacher CB might then ask: "How are you?" to which learners would answer: "Well. How are you?"

When doing written activities from their workbooks or worksheets learners from all three classes would sit at their desks. Regularly, after the teachers had finished the lesson, learners would have follow-up activities, such as colouring and drawing, which will be performed at their desks.

#### **4.2.2.2 Use of AL during AL lessons**

During the observation period the researcher noted that only one teacher (Teacher CB) encouraged learners to speak English. This was accomplished by asking questions and interacting with students in English, insisting that learners try and answer in English, and also by making use of what she calls 'talk time.' Learners were allowed to sit with their friends in order to interact and talk quietly to each other during the 15 minutes designated as 'talk time.' This took place at the end of the

English period and learners were expected to communicate in English. There were cards and games available and they were allowed to eat during this time.

Teacher CB explained that, because her learners are still very young, they cannot really speak English, but that she nevertheless encourages them to at least try. She told learners to ask for the English equivalent for the Afrikaans word if they are unsure. The Afrikaans learners seemed to struggle with English and the researcher overheard learners using a combination of Afrikaans and English. One girl asked Teacher CB what 'piesang' is in English and another learner asked if he could have a bite of his friend's 'toebroodjie.' Learners were also quick to chastise each other if one learner spoke only (or too much) Afrikaans, although even the chastising itself usually took place in a mix of Afrikaans and English. Overall, it appeared as if learners enjoyed the socialising and made an effort to speak English, partly also because the teacher warned that if they did not speak English 'talk time' would be stopped.

The overall teaching practices observed in the three AL classrooms are displayed in Table 9.

Table 9: Use of AL in the AL lessons

L2 teaching practices	Teacher EG	Teacher CB	Teacher CA
Greet learners in the L2	Seldom	Yes	No
Speak English during L2 lessons	Seldom	Yes	No
Speak clearly, using age appropriate language	Yes	Yes	Yes
Encourage learners to speak in the L2	No	Yes	No
Welcome learners' contribution in AL class	Mostly	Mostly	No

Table 9 demonstrates that, during AL lessons, teachers fairly often made use of code switching and did not encourage learners to speak English. In addition, the researcher observed no varying teaching styles incorporating different activities to help maintain learners' interest and cater for learners with different learning styles. Vocabulary teaching seemed to be limited to AL lessons and teachers did not, for

example, incorporate English vocabulary in the Mathematics class by giving the English equivalent for terminology, e.g. triangle, square, circle, in order to familiarise learners with the English terminology.

#### **4.2.2.3 Choice of vocabulary**

The Department of Education's *Grade 1 English First Additional Language* workbooks were used in all three classrooms. The work in the *Grade 1 English First Additional Language* workbooks is grouped into different topics or themes, such as *gardening* and *sea animals*, with each unit containing vocabulary lists pertaining to the specific topic. These lists are short, usually comprising of five or six words each. The topic of *weather*, for instance, presents 'hot, rain, clouds, snow, wind' as vocabulary (Department of Basic Education, 2014:35). Sometimes the words in the lists start with the same letter, as, for example, in: 'bed, book, bike, butterfly, bananas, and balloon' (Department of Basic Education, 2014:35). When deciding which vocabulary words to teach, all three teachers made use of the word lists provided in the workbooks.

In addition to the word lists in the *English First Additional Language* workbook, Teacher CB gave her learners extra word lists to learn. She created these lists herself, although it was not clear how she decided which words to include. There were about ten Tier 1 and Tier 2 words in each additional list and these were given to learners on average twice a week. On Fridays the learners from Control Group B wrote short word tests about the lists, although the focus of these tests was on spelling and not on word meaning. These were the only vocabulary assessments the researcher witnessed during the observation periods in the three groups.

#### **4.2.2.4 Context-based instruction**

The themes in the workbooks provide natural contexts for the vocabulary and, accordingly, when the three teachers explained word meaning it was done in a specific context. When introducing a new theme, both Teacher EG and Teacher CB asked questions about the learners' knowledge and personal experience related to the theme (in other words, they activated learners' existing knowledge). When

discussing ‘*Going to the beach*’, for example, Teacher CB asked questions like: “Who has been to the beach?”, “What did you do there?” and “Did you swim or build a sand castle?” In this way teachers engaged learners in discussions not only about the new theme, but also about the new words. Although learners were asked theme-based questions, they were not encouraged to elaborate on their answers and, other than answering the questions, learners were not interactively involved in the learning process. Learners were, for instance not asked to use the words in a sentence nor were they asked whether they understood the meaning of the vocabulary.

#### **4.2.2.5 Teacher-learner interaction**

Learners’ contributions did not always seem to be welcomed by the three participating teachers. For example, Teacher CA asked learners who wanted to comment and to ask questions not to do so during the lesson. In all three classrooms learners were not given the opportunity to use the new English vocabulary and their responses were often limited to one-word answers (“me,” “yes” and “swim”) and choral repetition. Even though the English lessons were theme based, learners were not given multiple meaningful exposures to new vocabulary. Teachers labelled the words and then moved on. The same word was seldom used in a different context within the same lesson. Furthermore, learners were not encouraged to guess the meaning of unknown words, which, according to Nation (2001), is one of the most important methods of vocabulary learning.

The researcher observed Teacher EG teach the topic ‘*Weather*’ in the *Grade 1 English First Additional Language* workbook (Department of Basic Education, 2014:41) to her Grade 1 learners. Learners were asked what the weather was like during the past week and had to draw a line from a picture to a corresponding activity done on a specific day of the week. For instance, a picture of a boy hanging up washing corresponds with the sentence: ‘I wash my clothes on a Monday’ (refer Figure 3).

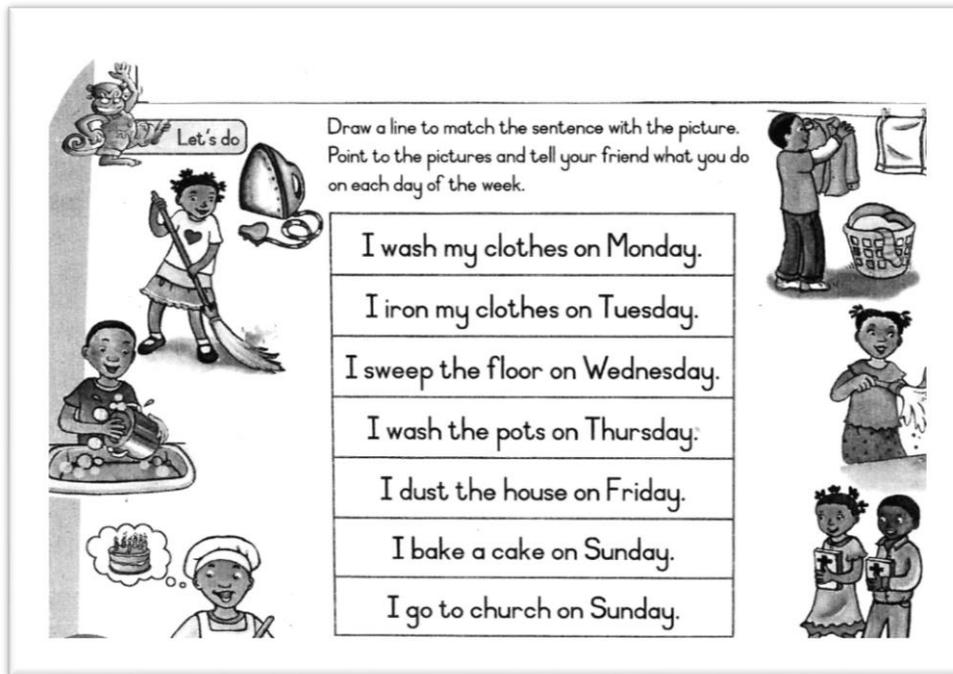


Figure 3: Matching sentences and illustrations (Department of Basic Education, 2014:41)

The exercise in Figure 3 depicts seven sentences and seven pictures, one for each day of the week. Teacher EG called on individual learners to answer questions (“What do we do on a Tuesday?”), or do certain activities (“Show me what we do on a rainy day”). Learners struggled to answer the questions correctly and seemed to give random answers like “washing,” “skottelgoed” (dishes) or “bak ‘n koek” (bake a cake) – describing the workbook illustrations without making an association between the question and the corresponding answer or action shown in the workbook

During the lesson the class was asked various questions, like what their favourite day of the week is and which type of weather they prefer. However, Teacher EG did not follow up on the learners’ comments and answers. The researcher noticed that this happened often during teacher-learner interaction. Teachers would ask questions and, although learners were usually happy to supply the answers, or at least try, teachers would seldom follow up or elaborate on learners’ answers. Instead, topics like ‘*weather*’ and concepts like ‘*rain*’, ‘*sun*’ and ‘*clouds*’ were mainly introduced through pictures and activities. Tables 10 and 11 respectively supply more detail about the teacher-learner interactions the researcher observed.

Table 10: Teachers response during English lessons

Teachers' response to learners	Teacher EG	Teacher CB	Teacher CA
Acknowledge useful contributions	Yes	Yes	Yes
Praise appropriate answers/behaviours	Yes	Yes	No
Correct learners with sensitivity	Yes	Yes	Yes
Clarify and elaborate on learners' responses	Seldom	Seldom	Seldom

Table 11: Learners response during English lessons

Learners' response during English lessons	Experimental Group	Control Group B	Control Group A
Speak English during L2 lessons	Seldom	Yes	No
Understand simple questions	Yes	Yes	Yes
Volunteer to answer questions	Yes	Yes	Seldom
Respond to simple, literal questions	Yes	Yes	Seldom
Participate in lessons	Yes	Yes	No
Are attentive and focused	Mostly	Yes	Mostly
Ask questions	Yes	Yes	No
Nod and indicate they are listening/understanding	Yes	Yes	Yes
Are able to identify objects like 'dog', 'man'	Yes	Yes	Yes
Are able to draw pictures about words/objects	Yes	Yes	Yes

Table 10 indicates that all three teachers were responsive to their class during the English lessons, but did not elaborate on or clarify learners' responses. Doing so gives teachers the opportunity to further interact with learners and draw them into an

English conversation. Table 11, in turn, shows that the response of learners' during the English lessons varied from class to class with the learners in Control Group B being the most likely to contribute and ask questions and the learners in Control Group A the least likely to interact with their teacher.

#### **4.2.2.6 Explicit vocabulary teaching**

As far as explicit vocabulary teaching is concerned, all three teachers explained vocabulary by saying a word out loud and then supplying the Afrikaans equivalent for the word. If a definition for a word was given—a simple, learner-friendly definition—it was done in the Home Language (Afrikaans), as were any additional explanations provided by the teacher. In the Experimental Group and Control Group A, the language of learning and teaching for English lessons seemed to be Afrikaans for the majority of the time. Teacher CA would point to an illustration in the *Grade 1 English First Additional Language* workbook, (Department of Basic Education, 2014:30) and say “blom/flower” and “bok/goat”, the assumption being that the illustration, accompanied by the Afrikaans word, was enough information for learners to understand the English word or concept. However, not all the words in a particular lesson were explained. The researcher estimates that, over the observation period, only half of the words used in any given lesson were explained. This might be because the teachers assumed that learners know the meaning of the words, but it might also be an indication that teachers were not particularly concerned about L2 vocabulary teaching or aware of specific vocabulary teaching strategies. It was therefore difficult for the researcher to ascertain whether the learners understood all the English vocabulary that was used in a specific lesson. Table 12 summarises the information from the observation sheets in terms of the vocabulary strategies and teaching methods used by the three teachers. The table focuses on the instruction methods used to teach word *meaning* (as opposed to phonetic instruction discussed hereafter).

Table 12: Vocabulary teaching strategies – word meaning

Strategies for vocabulary instruction	Teacher EG	Teacher CB	Teacher CA
Explain word meaning explicitly	Seldom	Yes	Seldom
Explain all the vocabulary in a lesson	No	No	No
Explain vocabulary in Afrikaans	Yes	Yes	Yes
Draw connections between a word and real life	On occasion	Yes	On occasion
Use context in which the word is used	Yes	Yes	Yes
Make use of synonyms	No	Seldom	No
Word discussion	No	No	No
Check whether learners understand vocabulary	No	Seldom	No
Use examples familiar to learners	Yes	Yes	Yes
Conceptual vocabulary like shapes and sizes are built	No	No	No
Multiple word exposure	No	Seldom	No
Ask open-ended questions	No	No	No
Make use of total physical response	No	No	No

Table 12 demonstrates that although all three teachers made use of context and used examples familiar to learners their vocabulary teaching can be improved by implementing simple strategies like asking open-ended questions and exposing learners to vocabulary more than once. Using English instead of the HL (Afrikaans) when explaining words will also increase learners' exposure to the AL and contribute to word learning. An example of the scant use of English during AL lessons and

specifically during the explanation (or lack thereof) of word meaning is illustrated below with the use of a picture from a Department of Education workbook.



Figure 4: Vocabulary lesson (Department of Basic Education, 2014:31)

Figure 4 is an example of a lesson in The Department of Education's *Grade 1 English First Additional Language* workbook (Department of Basic Education, 2014:31). As can be seen, the illustrations in the workbook describe the various English words and concepts clearly. The teacher simply reads the word 'sleeping' and learners can understand from the picture what the little girl is doing. Very little explanation of the word is necessary. Similarly, it is easy for learners to complete the activity, through colouring either the moon or the sun, depending on when the

activity takes place. All this can be done without actually hearing, understanding or knowing the English word 'sleeping'. The researcher observed Teacher CA teaching this lesson and, although the learners were able to do the activity quite accurately, the focus of the lesson was not on the English vocabulary. In fact, Teacher CA simply asked learners in Afrikaans to choose either the sun or the moon without reading the equivalent English terms and words.

#### 4.2.2.7 Use of visual aids

Linked to the previous section (4.2.2.6) the words in the workbooks used in class were usually accompanied by colourful pictures and illustrations demonstrating the meaning of the vocabulary. All three teachers frequently made use of these visuals during the English lessons and would introduce new L2 words by pointing at the picture or illustration of the word, encouraging learners to look at the pictures. In this way, the word was connected to the illustration, thereby promoting understanding. Table 13 provides a breakdown of the visual aids used by the teachers.

Table 13: Visual aids used for vocabulary instruction

Strategies for vocabulary instruction	Teacher EG	Teacher CB	Teacher CA
Use of visuals: pictures & illustrations	Yes	Yes	Yes
Use of visuals: posters	No	No	No
Use of visuals: flashcards & photos	No	No	No
Use of visuals: drawing pictures on the board	No	No	No
Use of visuals: real objects	No	No	No

Learners would follow the teacher and look at the pictures in their workbooks. Teachers would ask questions like "Where is the ball?" or "Show me the cat" and learners would be able to point at the correct picture. While pointing at the pictures teachers would ask questions like: "What is this?" or "This is a . . .?" This strategy of pointing and labelling was often used by all three teachers. Learners would eagerly reply with one word answers like "sea/see," "fish/vis" or "sun/son" - a combination of

English and Afrikaans. Learners seldom gave more than one word answers. The teacher would then either repeat or supply the correct answer in English. Regularly, however, teachers would simply name and label one word and then move to the next. Therefore, although teachers used illustrations and visual aids the full potential of these tools to enhance L2 vocabulary were not exploited. Additional visual aids like posters and flashcards were not used.

#### **4.2.2.8 Phonetic instruction**

As mentioned in 4.2.2.6, although teachers did teach vocabulary, little focus seemed to be on teaching word meaning (as opposed to word recognition). As part of their teaching, all three teachers would, upon labelling a word, pronounce the selected word multiple times in order for learners to hear the word repeatedly. The teachers would then prompt the class to repeat the word: “Let’s all say ‘rain’ together”. Word repetition was a regular technique used by teachers. During the lesson on ‘*Weather*’, Teacher CB, for instance, said: “Let’s all say the days of the week together, in English”. By repeating the word learners create a phonological representation of the word. Establishing a phonological representation of a new word is, according to Beck and McKeown (2001), linked to word learning.

At some point during the observation periods all learners had to repeat and chant words and their definitions and, in all three classes, learners were expected to memorize word lists (thereby engaging in rote learning). In Control Group A learners had to repeat and chorus English vocabulary, but the researcher did not witness the teacher specifically instructing learners to remember or learn any word lists.

Teacher CB further highlighted the phonological aspects of words by breaking the selected word down into individual letter sounds and sounding the word out: ‘b-i-r-d’. This was also observed in the Experimental Group and Control Group B.

Overall, all three teachers placed much emphasis on teaching phonics and pronunciation. Even though the *Grade 1 English First Additional Language* workbook is divided into topic-based units, there are also lists of unrelated words to facilitate the teaching and learning of letter sounds. For instance, the p-sound was the main focus of one of the Experimental Group’s lessons (refer Figure 5). Learners had to say the words: ‘pig’, ‘pot’, ‘pat’, ‘pit’, ‘pond’ and ‘pan’ (Department of Basic

Education, 2014:19). After that learners had to tick pictures with the p-sound and then 'say the words and listen to the sounds' (Department of Basic Education, 2014:19). The emphasis of this lesson was on the letter-sound relationship and the pronunciation of the letters, sounds and words and not on the meaning of the words. Learners willingly chorused the words and seemed to be familiar with this type of verbal activity. As far as the matching exercise was concerned some learners seemed to struggle at first to get the corresponding English vocabulary for the pictures but, once a word was identified they were able to recognize words with a p-sound with relative ease.

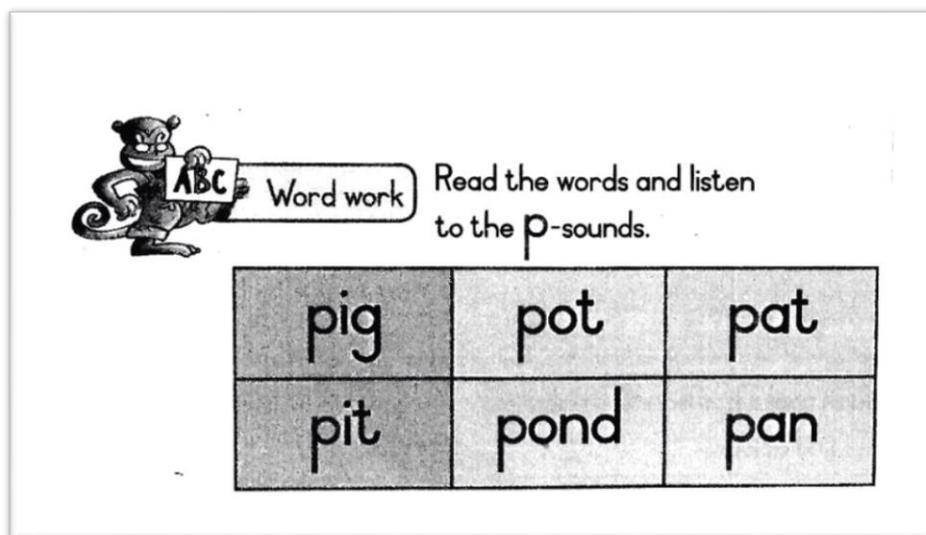


Figure 5: Letter-sound lesson (Department of Basic Education, 2014:19)

The researcher noticed that often during the English lessons a large amount of time was spent on letter sounds and the focus of word instruction was phonetic instruction. This seemed to be the case in all three classrooms and is in line with the Curriculum and Assessment Policy Statement (CAPS) for Grades 1-3 (Department of Basic Education, 2011a). This CAPS document states that “specific attention should be given to phonetics throughout the Foundation Phase” (Department of Basic Education, 2011a:16). The CAPS document continues that there should be “a strong focus on developing oral language in Grade R and 1” (Department of Basic Education, 2011a:12). Table 14 contains vocabulary teaching strategies observed, pertaining specifically to phonics instruction of vocabulary.

Table 14: Vocabulary teaching strategies - phonetics

Strategies for vocabulary instruction	Teacher EG	Teacher CB	Teacher CA
Pointing and labelling	Yes	Yes	Yes
Pronouncing words several times	Yes	Yes	Yes
Learners repeat/chant words	Yes	Yes	Yes
Rote learning	Yes	Yes	Yes
Learners are given word lists to memorize	Yes	Yes	No
Focus on individual letter sounds	Yes	Yes	Yes
Point out initial sound in familiar words e.g. p-pot	Yes	Yes	Yes
Sounding out words	Yes	Yes	Yes
Focus on phonetics	Yes	Yes	Yes
Clap out syllables to words	No	No	No
Vocabulary games	No	No	No

Pointing and labelling, rote learning, chanting and sounding out words were popular techniques used by all three teachers for vocabulary instruction. In general, the emphasis in all three classrooms was more on phonetics than on word meaning.

#### 4.2.2.9 Incidental vocabulary instruction

In terms of incidental vocabulary teaching, all three teachers played English DVDs in their classrooms. This served as an additional way in which learners were exposed to English vocabulary (refer Table 15 for further incidental exposure to L2 vocabulary). However, the main aim of these DVD sessions did not seem to be to enrich vocabulary, but rather to keep learners occupied. Often, at the end of the day and especially on Fridays, the teachers would put on a DVD and learners would spend an hour or more watching popular animation movies. Control Group B in School B had a DVD player and a TV in their classroom, while in School A the

Experimental Group teacher played DVDs on her private laptop and the learners from Control Group A had to come to her classroom to watch DVDs.

By exposing learners to English through the medium of DVDs (as well as nursery rhymes and songs) teachers used the process of incidental learning, (refer 2.5). However, it seemed that the teachers were unaware of the fact that exposing learners to English through these mediums could improve the learners' English proficiency and, more specifically, their English vocabulary. The learners' incidental vocabulary exposure is presented in Table 15.

Table 15: L2 Incidental vocabulary exposure

Additional exposure to English (words)	Teacher EG	Teacher CB	Teacher CA
Watch English DVDs	Yes	Yes	Yes
Listen to English songs and rhymes	Yes	Yes	No
Sing English songs	Yes	No	No
Repeat English rhymes	Yes	No	No

The learners of the Experimental Group were exposed to English in the form of English DVDs, songs and rhymes more than the other two groups. In general, although Table 15 shows that there were ample opportunities for incidental vocabulary learning in all three classrooms, teachers seemed unaware of the value of their resources, or simply were not familiar with the concept of incidental vocabulary instruction.

#### **4.2.2.10 Additional resources and activities**

In terms of resources other than visual aids and media, the only classroom where the researcher saw books was in Control Group B, which had a 'reading corner'. It had a small bookcase with books that learners could page through and look at when they were finished with their work. These books were both in English and Afrikaans and were mainly picture books with large illustrations and few written words. Teacher CB explained that these were books donated by parents. Neither school had a library.

Follow-up activities consisted of colouring the pictures, drawing key concepts (such as 'my family' – one of the few ways in which there was a focus on word meaning) and using the stickers in the workbook. Instructions and explanations were given in Afrikaans by Teacher EG and Teacher CA, while Teacher CB spoke to her learners mainly in English interspersed with some Afrikaans words. Learners seemed to enjoy these follow-up activities, but they did not always serve to reinforce the meaning of the vocabulary. While learners were busy with their work sheets Teacher EG played nursery rhymes and did English sing-along songs. This created a peaceful atmosphere in the classroom, while learners worked individually.

Another follow-up activity that was used by two of the teachers (in the Experimental Group and Control Group A) was to ask learners to look for pictures of certain words in the magazines available in class. Learners were expected to look for pictures of 'fish', 'sand' and 'sun' and, once found, cut the pictures out and paste them into their workbooks. While looking for pictures learners were allowed to interact and talk to each other. Learners of all three groups spoke to each other in Afrikaans. The researcher observed, that during the English lessons, when learners spoke to each other they did so in Afrikaans (with the exception of the 'talk time' activity discussed in 4.2.2.2).

Apart from the explicit and implicit vocabulary teaching that took place during AL classes the researcher was also particularly interested in any storybook reading that took place in the classrooms. The following section will briefly discuss these practices, as observed by the researcher.

#### **4.2.2.11 Storybook reading**

Apart from the structured vocabulary lessons, another main focus of this study is the use of storybook reading. Therefore the researcher was particularly interested in any story book reading that took place during the English lessons, as well as any vocabulary instruction that took place in conjunction with the reading (the latter is discussed in 4.2.2.12). As discussed in 2.4.2, storybook reading is an opportunity to be an interactive reading and learning experience where learners and teachers share the reading of an enlarged text. The CAPS document specifically stipulates that shared reading should take place during the Foundation Phase (DBE, 2011a:13). The document goes on to say that the purpose of shared reading is to "expose

learners to their additional language in a meaningful, supportive context”, and so develop their emergent literacy.

The researcher observed that the CAPS document promotes developing emergent literacy in Grade 1 (refer 2.8.1 for discussion on emergent literacy). Essentially, it entails that children develop knowledge of reading and writing before they learn to read and write; it is thus a process that starts before pre-school, possibly as early as at birth (Whitehurst and Lonigan, 1998), but definitely before Grade 1. In this sense the CAPS document seems to be in conflict with the theoretical approaches to emergent literacy. Generally one assumes that a degree of emergent literacy and developing “concepts of print” (DBE, 2011:13) are already in place when learners reach Grade 1 and that the focus of storybook reading in Grade 1 should rather be on developing vocabulary, oral language and word recognition. Unfortunately, as the researcher observed in the Experimental Group and Control Group A, for a variety of reasons (low-SES status, poverty, print-poor home environment, poorly educated parents), emergent literacy is not always developed when learners reach Grade 1, even more so as far as the L2 is concerned. Accordingly, teachers need to spend (valuable) teaching time developing the basic concepts of print and literacy. One such way is through storybook reading.

Despite the fact that the CAPS document recommends that teachers read or tell stories to learners twice a week (Department of Basic Education, 2011a:24), it was observed that only two of the teachers (Teacher EG and Teacher CB) made use of storybook reading as a way to expose learners to the L2 vocabulary. Teacher CA, the teacher from Control Group A, only read to her learners in their Home Language (Afrikaans). She did not make use of storybook reading in the Additional Language (English) classes. Story book reading observations could therefore not take place for Control Group A.

Both Teacher CB and Teacher EG used Big Books during the storybook reading sessions. A Big Book is an enlarged text with a simple and clear story, repetitive phrases and plenty of big illustrations (refer 2.6.2). The pictures and the illustrations in the Big Books were large enough for all the learners to see them clearly. Teacher CB also read other interesting, although basic, English stories to her learners. These included *Flying friends* (Jarman & Parker-Rees, 2002) and *Amelia Bedelia goes*

*camping* (Parish & Sweat, 1985). These books contained more advanced and unfamiliar vocabulary than the Big Books and Control Group B was consequently exposed to more challenging L2 vocabulary.

The storybook reading sessions took place while learners sat on the carpet in front of their teacher. Teachers would read the story, pointing to the pictures of various objects mentioned in the text. By using this labelling strategy word meaning is enhanced, as learners can associate any unfamiliar words with the pictures. In this way learners' understanding of the text is improved, without unnecessarily interrupting the flow of the story too much.

#### **4.2.2.12 Interactive vocabulary instruction during storybook reading**

Informed by specifically 2.6.2 (Interactive storybook reading) the researcher was particularly interested in how teachers engage learners during storybook reading sessions; in other words, the interactive vocabulary teaching practices employed by the teachers.

It was observed that Teacher CB's reading session contained more questions, comments and interactions with her learners than that of Teacher EG. Teacher CB would, for instance, elaborate on the themes and concepts during the reading and ask questions about the characters and events and sometimes also about word meaning and, in this way, encourage learners to participate in the reading session. This enabled learners to be active participants during the shared book reading and to engage with the text, as advised by the CAPS document (Department of Basic Education, 2011a:16).

Teacher CB made use of the Big Book *Granny's house* and read the first page to her Grade 1 class: "I visit my granny whenever Mommy says I can. She has a pretty house with lots of trees around it". After reading this Teacher CB asked questions like: "Who likes to visit their Granny?", "Where does your Granny stay?" and "What does your Granny's house look like?" Teacher CB explained the word "granny" by giving the Afrikaans equivalent of "ouma" (there was no picture of a granny in the book). Learners were enthusiastic to answer the questions and tell Teacher CB about their grannies. Although these questions were asked in English, Teacher CB would often repeat or explain the questions in Afrikaans. Learners would answer in a

mixture of Afrikaans and English. Teacher CB would, however, insist that they use key words like 'granny' and 'house'. For instance, when a girl answered: "My ouma bly naby die see" (My granny lives near the ocean), Teacher CB said: "Yes, but what is 'ouma' in English?" Learners were eager to answer this question with "Granny". Similar exchanges took place for the word 'house'. Throughout the session, whenever a learner would forget the English word, Teacher CB (and their fellow learners) would remind them not to say 'ouma' or 'huis' but rather 'granny' and 'house'. Other words that were emphasised during the reading session were 'room', 'grandchildren', 'kitchen', 'love' and 'sweets'. The follow-up activity consisted of learners drawing a picture of their Granny's house with Granny standing next to it. From the observations, the researcher concluded that learners did learn some English vocabulary from the storybook reading lessons of Teacher CB.

During reading sessions Teacher EG did not focus on key vocabulary. Questions were mainly asked in the home language, which is in accordance with the CAPS document that encourages teachers to ask questions in the learners' home language since their L2 is not yet sufficiently developed in Grade 1 for them to understand the story (Department of Basic Education, 2011a). Although learners were encouraged to answer the questions and talk about the story, Teacher EG, in contrast to Teacher CB, did not encourage learners to speak English. Teacher EG also tended to translate most of the reading into Afrikaans, almost immediately after reading a sentence. She would, for example, say: "The little girl had red shoes – sy het rooi skoene". In this way, the learners understood the meaning of the sentence/page, but the focus was not on vocabulary teaching and the learners' attention was not drawn to (key) words.

There was very little interaction between Teacher EG and the learners during the reading sessions and almost no vocabulary discussion. Teacher EG asked questions such as: "Show me the little girl in the red shoes", "Where is the table?" and "Who is crying?" Learners would guess the answer to questions, but the researcher noticed that, in the Experimental Group, several learners would give incorrect responses before the correct answer was given.

More broadly, the researcher observed that although teachers asked questions during the reading sessions neither Teacher EG nor Teacher CB actively followed up

on learners' responses, with the result that opportunities to emphasise vocabulary and interact constructively with learners were often lost. This is unfortunate since adult interaction together with answering questions and receiving feedback during reading sessions is a powerful way to develop learners' vocabulary (as argued in 2.6.2). A summary of the observation sheet data the researcher made during the storybook reading sessions is contained in Table 16.

Table 16: Vocabulary instruction during storybook reading sessions

Shared book reading	Teacher EG	Teacher CB	Teacher CA
Read to learners in the L2	Yes	Yes	No
Use Big Books	Yes	Yes	No
Other reading material (apart from Big Books)	No	Yes	No
Short discussion before the reading	Yes	Yes	No
Storyline is clear & simple with repetitive words	Yes	Yes	No
Uses engaging body language, tone & volume	No	Yes	No
Conveys enthusiasm for the text	Yes	Yes	No
Asks questions during reading	Yes	Yes	No
Use Afrikaans to ask questions	Yes	Yes	No
Reading material captures the attention of learners	Mostly	Yes	No
Encourages learners to answer questions	Yes	Yes	No
Encourages learners to speak English	No	Yes	No
Illustrations are discussed	Yes	Yes	No
Finger is used as 'pointer'	Yes	Yes	No
Vocabulary instruction	No	No	No
Actively involves learners	No	Seldom	No

Shared book reading	Teacher EG	Teacher CB	Teacher CA
Follows up on learners' responses	No	No	No
Pointing and labelling	Yes	Yes	No
Encourages learners to guess the meaning of unfamiliar words	No	No	No
Encourages learners to look for contextual clues to guess the meaning of words	No	No	No
Re-reading stories	No	No	No
Follow-up activities	No	No	No

As can be seen from Table 16, in both classes where storybook reading was practised, vocabulary instruction during shared book reading took place mainly through labelling and explaining words in Afrikaans. Both teachers did, however, use their fingers as 'pointers' to enable learners to follow the text. The teacher of Control Group A did not read to her learners in the AL at all. Learners were not asked to guess the meaning of words. The teachers did also not explain to learners how to look at contextual clues to shed light on word meaning. The researcher did not observe any teacher read the same text more than once and no follow-up activities were given. In order to increase vocabulary acquisition during shared storybook reading these vocabulary teaching strategies (guessing, contextual clues, multiple exposure and follow-up activities) should be incorporated in the reading sessions (refer 2.6.3).

#### **4.2.2.13 General observations**

As mentioned earlier, apart from completing the observation sheet, during the observation period the researcher also made additional observations (refer Appendix 9) about aspects not covered by the observation sheet and which were deemed pertinent to the study. These observations are discussed in the following section.

- AL instruction time

A notable observation the researcher made was concerning the time set aside for L2 teaching in the various classrooms. The CAPS document states that the instruction time for the Foundation Phase, Grade 1 Home Language, is seven to eight hours per week, while for Additional Language (in this case, English) it is a minimum of two hours and a maximum of three hours per week (DBE, 2011a). School A (the Experimental Group and Control Group A) spent the minimum time (two hours) per week teaching English, while School B (Control Group B) spent at least three hours a week on English teaching. This, in itself, is likely to have an influence on the English proficiency of learners, as the limited instruction time for English in School 2 does not allow time for in-depth teaching and learning.

- Homework

The second noteworthy observation was regarding homework. It became apparent during the time the researcher spent in the various classrooms that Control Group B received reading, spelling and maths homework on a regular basis. This, however, was not the case in the two Grade 1 classes in School A. Upon enquiring about the lack of homework, the researcher was told that, because of the poverty and social situations the learners face at home, it is almost impossible for them to do homework. Another reason cited was the lack of parental support and the fact that some parents show very little interest in their children's education. Work books sent home often return dirty and torn, or are not returned at all. In addition, learners seldom do the homework expected of them. The teachers therefore decided not to give their Grade 1 learners homework. It needs to be stated that this is not the official policy of the school, but is what the researcher observed in these two classrooms. Homework might be given in the other grades at this school.

- Socio-economic factors

The researcher observed that the learners in School A were on a feeding scheme (refer differences in SES, 4.4.1.2) and for many of them this was the only decent meal they got per day. Although not academic observations and not part of the scope of the research the researcher feels that the feeding scheme speaks to the SES status of the learners in School A and, as discussed earlier (refer 2.9.3 ) SES in South Africa has a direct impact on academic development. In fact, during the

research study the researcher came to the realization that the education problem and the under- and poorly educated learners in South Africa is far more complex than low quality education or poorly trained teachers (although these are contributing factors). The low literacy levels of South African learners are deeply rooted in the socio-economic fabric of our society. It stands to reason that the socio-economic problems such as poverty, unemployment, drug abuse, domestic violence and alcoholism (refer 3.4.2) experienced in the community where School A is situated, are not beneficial for creating an environment in which literacy development will thrive (Pretorius & Mampuru, 2007). As Pretorius and Mampuru (2007:40) acknowledge that ‘it is not easy to educate poor children.’

However, during the 18 days of the observation period the researcher focused on the structure of the English lessons and the teachers’ attitudes and strategies as far as L2 vocabulary teaching is concerned. The results of the classroom observations will serve to inform Research Question 2 and Research Question 3 and will be summarised in the following section.

#### **4.2.2.14 Answering Research Question 2**

In summary, the data gathered from the classroom observation sheets and the researcher’s notes can be used to answer Research Question 2:

- What are the existing vocabulary instruction practices in the participating Grade 1 classes?

The data established that L2 vocabulary instruction in the three observed classrooms took place within the context of theme-based learning – both during English lessons and storybook reading sessions. Teachers made use of specific themes and topics for instruction, discussions and activities. However, multiple exposures to new words in different contexts were not observed.

In developing learners’ L2 vocabulary, all three teachers focused mainly on word recognition. Accordingly, the most frequently observed vocabulary teaching strategies were:

- Use of visual aids (pictures and illustrations)
- Pointing at and labelling of words

In addition, teachers regularly employed strategies to enhance word memorization, pronunciation and the phonological aspects of the words. These vocabulary teaching strategies included:

- Chanting and choral repetition of words
- Rote learning
- Memorization of word lists.

Vocabulary teaching strategies to develop learners understanding and use of vocabulary were the least evident during the observations. When these strategies were employed, explanations and discussions often took place in the learners' home language (Afrikaans).

In other words, even though vocabulary instruction does occur, it occurs at a rather superficial level, and teachers mostly seem unaware of its importance in language teaching and the multitude of strategies and methods that exist for its effective instruction.

#### **4.2.3 Pre-intervention teacher interview - qualitative data**

In this section the data from the Experimental Group teacher's interview regarding her attitude and approach to L2 vocabulary teaching before the intervention will be presented.

The CAPS document (Department of Basic Education, 2011a) states that, at the end of their Grade 1 year, learners should know between 700 – 1000 L2 vocabulary words in context. Although the document contains detailed methods regarding how to teach L2, - and emphasises the importance of building an oral vocabulary it does not specifically address how teachers must go about choosing these vocabulary words. The attitude and pedagogical beliefs of teachers regarding English learning are therefore important as these will, to a large extent, determine how and what they teach as far as L2 vocabulary is concerned.

From the interview, it became clear that Teacher EG's concern centres on the overall language proficiency and academic development of her learners and that, although she regards vocabulary as 'important' and 'valuable,' teaching L2 vocabulary is not a priority in her class. She feels that the poverty and violence in the community that her learners live in impact negatively on learners and their ability to do their school work

and homework. Teacher EG continued that there are learners in her class that suffer from foetal alcohol syndrome, 'disadvantaged' learners and learners that suffer from emotional and intellectual problems. Learners often came to school on a Monday morning full of scrapes and bruises and the food they receive at school, as part of the meal/food scheme, is sometimes the only proper meal they get during the day (refer 4.2.2.13). These were the challenges which teachers at the school faced daily.

#### **4.2.3.1 Understanding and use of CAPS**

Teacher EG uses the Department of Education's *Grade 1 English First Additional Language* workbooks in her class. There are two books for Grade 1 and the work become progressively more difficult during the year. She feels the vocabulary learners are exposed to in these books is enough for Grade 1 and does not think it is necessary to teach any additional vocabulary. Learners work through the books during the year and the word lists in each unit are used as a guideline for teaching new vocabulary. Teacher EG was unsure whether the lists consist of Tier 1 or Tier 2 words (presumably because she was uncertain about the meaning of the terminology, the researcher did not pursue this line of questioning) but said that most words are 'simple and basic.' When asked about the word lists at the end of the CAPS document Teacher EG said that she is aware of the lists, but does not actively teach these words.

#### **4.2.3.2 Vocabulary teaching strategies**

Teacher EG showed a lack of knowledge about the various vocabulary teaching strategies available. She was aware of this lack and expressed her inability to successfully build learners' vocabulary, leading in turn, to her feeling overwhelmed by the task of teaching vocabulary in the L2.

In terms of the use of vocabulary teaching strategies Teacher EG said she often explicitly explains the meaning of words to learners, frequently in the learners' Home Language to ensure comprehension. The Grade 1 workbooks generally contain pictures of the vocabulary and she also incorporated this, as well as the context in which the words appear, in her explanations. Another strategy she cited was 'pronunciation' - learners orally repeat word lists and meanings in order to memorize or 'learn' the words. She added that 'pronunciation' is mainly used when teaching

letter sounds and explained that when teaching a specific letter sound words starting with the same letter are used to emphasise the specific letter/sound, for example s-un, s-and, s-ea.

Teacher EG used the word lists in the Department of Education's *Grade 1 English First Additional Language* workbook, and explained that she would repeat the words, emphasising the first letter so learners can hear the sound; afterwards, the whole class repeated the sound/word a few times. Teacher EG also exposes her learners to English (vocabulary) by means of DVDs and CDs, although unfamiliar words are not explained to learners. She stated that, she does not incorporate vocabulary teaching in other subjects, nor are learners assessed on their L2 word or vocabulary knowledge.

As witnessed during the classroom observations, this lack of L2 vocabulary teaching strategies, combined with her misconception about the importance of vocabulary, led to very little explicit L2 vocabulary instruction taking place in her lessons before the intervention.

#### **4.2.3.3 General opinion about storybook reading and vocabulary**

Teacher EG makes use of Big Books as a reading tool, but says the Big Books are 'quite expensive' and, because of financial constraints, the school only has two or three Big Books per grade; she feels the stories in these books are a bit simplistic and learners are bored by them. Teacher EG believes that her learners will not be able to understand if she reads more interesting or complex books to them in English, and consequently, storybook reading only takes place in Afrikaans and mostly as a reward for good behaviour.

Teacher EG explained that the community where the school is located is very Afrikaans and that learners get almost no exposure to English other than in the classroom. Consequently English proficiency and especially English vocabulary is a 'problem,' but, she continued there was no time to teach additional vocabulary (other than the short word lists in the workbooks) during the L2 periods.

Overall Teacher EG's opinion was that vocabulary can and will be acquired naturally and incidentally. Learning takes place all the time and Teacher EG believed that as learners continue with their schooling 'they will come across more words' and

concepts and as they are exposed to these words they will naturally acquire them. She regarded teaching the meaning of vocabulary as less important than teaching 'pronunciation' or phonic skills.

#### **4.2.4 Conclusion**

The previous sections presented the analyses and interpretation of the data obtained before the intervention. The researcher used a mixed methods approach – combining both quantitative and qualitative research methods.

Quantitative data were gathered using the Peabody Picture Vocabulary Test, Fourth Edition (refer 3.5.1). The analysis of these data enabled the researcher to establish that the three groups were homogenous and to obtain baseline data from all the participants before the intervention. Quantitative and qualitative data were collected during the classroom observations. Categorising these data the researcher analysed the vocabulary teaching strategies and overall AL practices used in the three class groups in order to answer research Question 2. The data collected form a semi-structured interview with the Experimental Group's teacher and the researcher's observations of the three class groups were also analysed and discussed.

The findings will serve as a point of reference to determine whether or not the intervention was effective in terms of research questions 1 and 3.

We will now move on to Phase 2 of the main study, namely the intervention. The following section will provide a brief overview of what the intervention entailed.

#### **4.3 DISCUSSION OF PHASE 2 – IMPLEMENTATION OF THE INTERVENTION**

The second phase of the research study consisted of the intervention (refer 3.7) which took place in the Experiment Group's classroom. The intervention consisted of explicit, interactive vocabulary instruction in the context of storybook reading. Each session lasted 30 minutes, and took place twice a week during the second and third school term. The intervention was performed by the Experimental Group's teacher (Teacher EG), after extensive training by the researcher (refer 3.7.4). During the training sessions the researcher demonstrated the lesson format to the teacher by reading a story to the class. Furthermore, the structure, outcomes and various L2 vocabulary teaching strategies of the lessons were discussed in detail. Any

questions Teacher EG had were answered and the researcher remained available throughout the intervention.

Once the intervention period was completed, the PPVT test was again administered to all learners in the third and final phase of the study.

#### **4.4 DISCUSSION OF PHASE 3 – POST-INTERVENTION**

After the intervention was completed the researcher gathered post-test data to ascertain whether or not the intervention had any effect on the Grade 1 learners' vocabulary development. In addition, the Experimental Group's teacher was once again interviewed to establish if the intervention had any impact on her approach and attitude to vocabulary teaching.

##### **4.4.1 Post-intervention learners - quantitative data**

In order to determine whether the intervention had any effect on the vocabulary knowledge of the Experimental Group the researcher had to again administer the PPVT-IV after the intervention. The quantitative data obtained from the post-test are discussed and statistically analysed in combination with the pre-test scores in the following section.

###### **4.4.1.1 Post-intervention administration of the PPVT-IV**

After the six months intervention period the researcher again administered the PPVT-IV test, this time to obtain the post-test score of all the learners. This allowed the researcher to compare the vocabulary scores of the learners before and after the intervention and answer Research Question 1. The researcher administered the test herself and each learner was tested individually. This time the assessment process was slightly easier as the learners, as well as the researcher, were now more familiar with the test instrument and the testing process. Learners were eager and happy to do the test because they knew what to expect. The testing was done over a period of four days at School A and during that period the researcher was able to re-test all the learners that took part in the pre-testing. In School B the post-testing was done over a period of two days. One learner was absent for both days and the researcher had to return the following week to assess this learner, but the end result was that the researcher was able to obtain post-test scores from all the 69 learners.

#### 4.4.1.2 Differences in mean scores

The first comparison to be drawn from the post-intervention quantitative data is the difference in mean scores. Table 17 summarizes the means of the post-test scores of the three groups.

Table 17: Post-test mean raw scores

Treatment Groups	N	Mean	Std. Dev
Experimental Group	26	49.77	16.32
Control Group A	25	33.88	12.37
Control Group B	18	46.11	15.13

The Experimental Group had a post-test mean score of 49.77; Control Group A had a post-test mean of 33.88 and Control Group B had a post-test mean of 46.11. The post-test score of the Experimental Group had the highest mean value of 49.77; while Control Group A's post-test score it the lowest with 33.88. The scores of the Experimental Group and Control Group B are close together with a mean score difference of only 3.66. The mean score difference between the Experimental Group and Control Group A however, is 15.89. The standard deviation of all three groups is high (a standard deviation of 0 signifies data points close to the mean).

Table 17 indicates that the post-test PPVT-IV scores are not very uniform, but spread out over a wide range, much wider than the scores of the pre-tests. Again, the Experimental Group and Control Group B's scores are closer together than the Experimental Group and Control Group A's standard deviation scores.

#### 4.4.1.3 Mean raw score growth

Although the post-test results show that the Experimental Group had the highest mean value at 49.77 the results need to be analysed in conjunction with the pre-test scores in order to be meaningful. This will allow the researcher to calculate and compare the mean raw score growth for each group. To facilitate this comparison the pre-test and post-test scores, as well as the mean raw score growth for all three groups were calculated and tabulated. The results of the comparisons are shown in Table 18.

Table 18: Comparison of pre- and post-test scores and mean score growth

Treatment Groups	Pre-test	Post-test	Mean raw score growth
Experimental Group	21.15	49.77	135.3 %
Control Group A	19.20	33.88	76.5 %
Control Group B	24.83	46.11	85.7 %

As can be seen from Table 18, the mean raw score growth for Control Group A was 76.5%, for Control Group B it was 85.7%. However, the biggest percentage improvement was the Experimental Group with a 135.3% growth in mean score. This means that the learners of the Experimental Group (which were exposed to the intervention) had the largest vocabulary growth in the period between the pre- and post-test.

#### **4.4.1.4 Within and between groups comparisons**

In order to analyse the pre- and post-test scores of the three treatment groups in terms of within-group and between-groups comparisons quantitative data analysis were performed in the form of descriptive statistics. The results of this data analysis are displayed in Table 19 on the following page. The detailed, descriptive data spreadsheet in Table 19 displays not only the means of the pre- and post-test scores of the three groups, but also the means of the combined groups, as well as the standard deviation (*Std. Deviation*).

Table 19: Analysis of mean scores of individual and combined groups

Vocabulary acquisition scores					
Effect	Level of Factor	Level of Factor	N	Mean	Std. Dev
Total			138	32.23	16.78
Treatment	EG		52	35.46	19.56
Treatment	CA		50	26.54	12.59
Treatment	CB		36	35.47	15.84
Time	Pre-		69	21.41	8.36
Time	Post-		69	43.06	16.12
Treatment*Time	EG	Pre-	26	21.15	9.39
Treatment*Time	EG	Post-	26	49.77	16.32
Treatment*Time	CA	Pre-	25	19.20	7.64
Treatment*Time	CA	Post-	25	33.88	12.37
Treatment*Time	CB	Pre-	18	24.83	6.92
Treatment*Time	CB	Post-	18	46.11	15.13

*EG = Experiential Group; CA = Control Group A; CB = Control Group B.*

The level of factor displayed in columns two and three indicates the independent variables. The three treatment groups, namely the Experimental Group, Control Group A and Control Group B are all independent variables. In addition, the treatment groups have two scores each, depending on the time the PPVT-IV was administered – a pre- and a post-test score.

For the purpose of the research the last six rows of Table 19 are important: summarizing the pre- and post-test scores of all three treatments groups. The standard deviation of all three groups is high, indicating that the PPVT-IV scores are spread out and not clustered around the mean. The Experimental Group has the highest standard deviation of 19.56, Control Group B has a standard deviation of 15.84 and Group A has the smallest standard deviation at 12.59.

The positive improvement from the pre- to the post-test mean scores for the Experimental Group was 28.62, the improvement displayed by Control Group A was

14.68, and Control Group B had an improvement of 21.28. The biggest improvement from a pre-test mean to a post-test mean is displayed by the Experimental Group (28.62). The difference between the mean post-test scores of the Experimental Group and Control Group A was substantial, with the improvement of the Experimental Group (28.62) being almost double the mean improvement of Control Group A (14.68). On the other hand, the difference in the post-test mean scores between the Experimental Group and Control Group B is only 3.66.

Although the results of the descriptive statistics indicate firstly, a substantial improvement in the vocabulary scores of the Experimental Group and secondly, that this improvement is bigger than the vocabulary growth in both control groups further statistical analysis still needed to be done to establish whether the differences in mean scores were significant enough to be meaningful.

#### **4.4.1.5 Establishing statistical significance**

Once the data and the general tendencies had been summarized further quantitative data analysis was done in the form of inferential statistics. Inferential statistics enables a researcher to determine the strength of the relationship between independent (causal) variables, and dependent (effect) variables and to evaluate whether the differences between the means is statistically significant. In addition, it provides the basis for assessment of whether the observed differences in scores can be generalized to the population (Dornyei, 2007).

An ANOVA with a post-hoc Least Significant Difference (LSD) for multiple comparisons was conducted to find out if there was a significant difference, after the intervention, between the PPVT scores/vocabulary acquisition of the Experimental Group and the two control groups. The data sets were analyzed in terms of within-group and between-group differences. The rationale behind using an ANOVA is that it allows the researcher to compare the scores of more than two groups. An ANOVA can therefore establish if the observable difference between the pre-and post-test scores of the three groups is significant. This is done by measuring the probability coefficient or *p* value. In social sciences a *p* value of .05 or less is considered significant (Landau & Everitt, 2004).

For the ANOVA, the independent variables were the three different Grade 1 groups: the Experimental Group, Control Group A and Control Group B. The dependent

variable was the target variable to be compared (Dornyei, 2007), and is L2 vocabulary acquisition expressed in terms of the PPVT-IV standard scores. The PPVT-IV scores are deviation-type normative scores. This means that the scores indicate the examinee’s development “compared with that of a well-defined reference group consisting of a large cross-section of people of the same age or in the same grade” (Dunn & Dunn, 2007:17). Coding for the numerical dependent variable was simple, since the value range of the variable is the same as the PPVT-IV test scores (Dornyei, 2007).

Table 20 displays the results of the ANOVA administration. An F-test was computed and checked for significance. An F value tests for a variation between sample means and an F value close to 1 indicates that there are no significant differences between the treatment groups and that the groups therefore are equal (Dornyei, 2007). DF refers to ‘degree of freedom’ and is a statistical figure that reflects the sample size (Dornyei, 2007:217).

Table 20: ANOVA

	Fixed Effect Test for vocabulary acquisition score Restricted Maximum Likelihood (REML) Grouping vars: subject, treatment, time Fixed: “treatment” + time + “treatment*time” Random: subject(“treatment”)			
Effect	Num. DF	Den. DF	F	<i>P</i>
Treatment	2	66	6.0052	0.004017
Time	1	66	219.4062	0.000000
treatment*time	2	66	8.7389	0.000430

The results for the treatment\*time calculation are  $F = 8.73$  and  $p = 0.00$ . This indicates that there was at least one significant difference among the means of the three groups and that vocabulary acquisition did in fact take place.

#### 4.4.1.6 Determining which mean differences are significant

However, although the ANOVA test can establish that there is a significant difference amongst the groups’ means, it is unable to determine which group(s) is/are

significantly different from the other. Consequently, a *post-hoc* Least Significant Difference (LSD) test for multiple comparisons needed to be conducted to establish which of the mean differences between the three groups were in fact significant. A *post hoc* test is only conducted if the F value of the ANOVA is significant (Dornyei, 2007). The results of the LSD test are reported in Table 21.

Table 21: Results of LSD test

LSD test; variable vocabulary acquisition score; simultaneous confidence intervals					
Cells	1 <sup>st</sup> Mean	2 <sup>nd</sup> Mean	Mean Differ.	Standard Error	<i>p</i> value
{1}-{2}	EG*pre	EG*post	-28.62	2.34	0.00
{1}-{3}	EG*pre	CA*pre	1.95	3.33	0.56
{1}-{4}	EG*pre	CA*post	-12.73	3.33	0.00
{1}-{5}	EG*pre	CB*pre	-3.68	3.64	0.32
{1}-{6}	EG*pre	CB*post	-24.96	3.64	0.00
{2}-{3}	EG*post	CA*pre	30.57	3.33	0.00
{2}-{4}	EG*post	CA*post	15.89	3.33	0.00
{2}-{5}	EG*post	CB*pre	24.94	3.64	0.00
{2}-{6}	EG*post	CB*post	3.66	3.64	0.32
{3}-{4}	CA*pre	CA*post	-14.68	2.38	0.00
{3}-{5}	CA*pre	CB*pre	-5.63	3.67	0.13
{3}-{6}	CA*pre	CB*post	-26.91	3.67	0.00
{4}-{5}	CA*post	CB*pre	9.05	3.67	0.02
{4}-{6}	CA*post	CB*post	-12.23	3.67	0.00
{5}-{6}	CB*pre	CB*post	-21.28	2.81	0.00

EG = Experiential Group; CA = Control Group A; CB = Control Group B.

Table 21 visually represents a comparison between the various pre- and post-test mean scores as well as the standard error and the *p*-values. The standard error of mean, displayed in Column 5, analyses the deviation within the different means and contains an estimation of how close the means of the various groups are to the mean of the entire population. If the standard error is small, the data are representative of

the true mean, but if the standard error is large, the data may have some defects (Dornyei, 2007).

The scores that are of interest for the current study are the within-group comparisons of the pre- and post-test mean scores of each of the three groups. The cell numbers in Column 1 represent the different groups and either the pre- or post-test score. Cell 1, for instance, represents the Experimental Group's pre-test score and Cell 2 = the Experimental Group's post-test score. The mean difference of -28.62 reflected in Row 1, Column 3 is therefore the difference in the means of the pre- and post-test scores of the Experimental Group, a negative result indicating that the post-test score was higher than the pre-test score. The standard error for the Experimental Group is 2.34 and the  $p$ -value is  $p = 0.00$ . The standard error is relatively small and indicates that the mean is sufficiently close to the true mean of the total population, and the study sample can be regarded as sufficiently representative of the population.

The mean difference for Control Group A's pre-and post-test scores is -14.68, with  $p = 0.00$  and the standard error is 2.38. The results for Control Group B is -21.28 with the  $p$  value at  $p = 0.00$  and a standard error of 2.81.

This within-group analysis shows that the difference in mean scores between the pre- and post-test scores of the Experimental Group ( $p = 0.00$ ), Control Group A ( $p = 0.00$ ) and Control Group B ( $p = 0.00$ ) are all three statistically significant. In other words, within-group improvement in the form of vocabulary acquisition took place within each group during the intervention period. The biggest improvement from pre-intervention to post-intervention mean scores took place within the Experimental Group, followed by Control Group B. Control Group A displays the smallest mean improvement.

In addition to the within group comparisons, the comparison between the three groups' post-test scores was also central to answering Research Question 1: whether explicit, interactive vocabulary instruction during L2 storybook reading impacts the vocabulary acquisition of Grade 1 learners. During the pre-intervention phase (refer 4.2.1) it was established that there was no significant difference in the  $p$ -values of the three groups, in other words the three groups were the same at the beginning of the research.

The three rows reflecting the post-test comparisons are highlighted in Table 21 for ease of reference. The mean difference between the Experimental Group and Control Group A's post-test scores is 15.89,  $p = 0.00$  and the standard error = 3.33. The results for the analysis of the difference in mean post-test scores for the Experimental Group and Control Group B is 3.66 and  $p = 0.32$ , with a standard error of 3.64. The mean difference between Control Groups A and B is -12.23 with a  $p$  value of  $p = 0.00$  and a standard error of 3.67. The multiple comparisons test shows that the standard error range from 2.34 to 3.67 and that both the Experimental Group and Control Group B performed significantly better in the post-test. The *post-hoc* LSD test shows the post-test mean scores of the Experimental Group and Control Group A to be significant at a very high level ( $p < 0.000$ ). However, the analysis further indicates that there is no statistically significant difference between the post-test mean scores of the Experimental Group and Control Group B, with a  $p$  value of  $p = 0.32$ .

#### 4.4.1.7 Receptive vocabulary development

Figure 6 illustrates this PPVT-IV receptive vocabulary development. All three groups showed an increase in mean scores with time

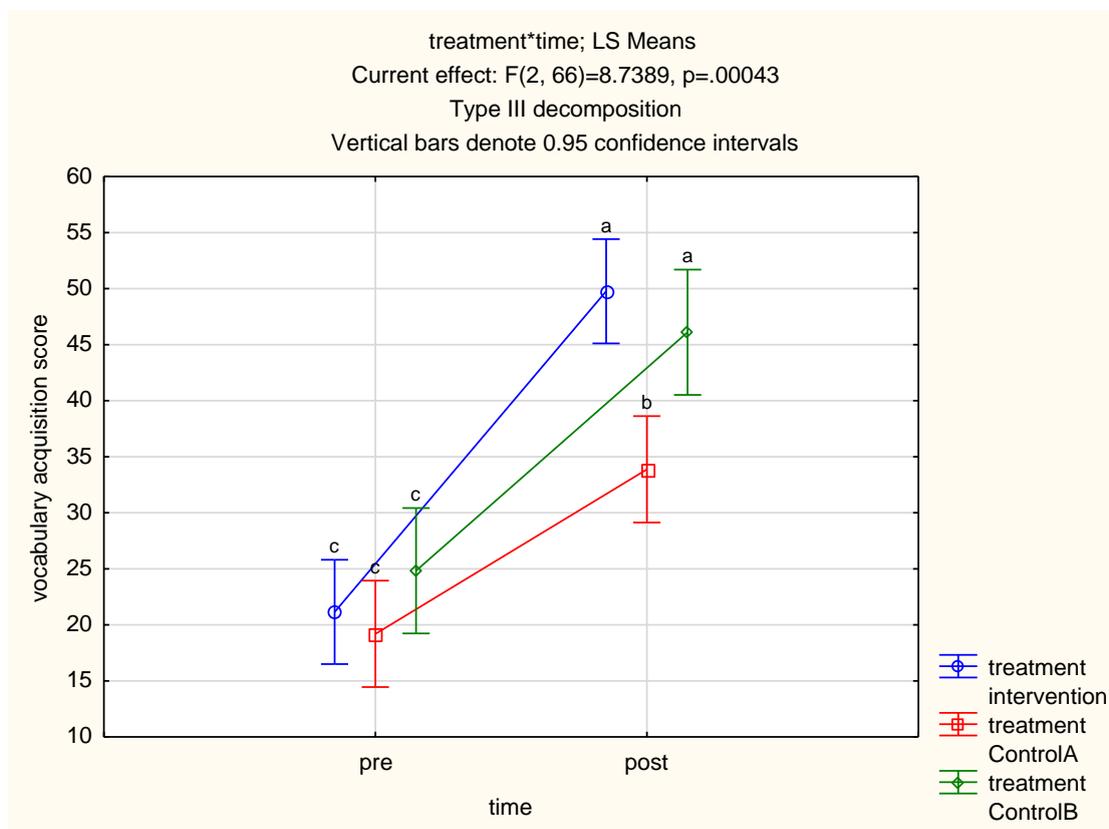


Figure 6: PPVT-IV receptive vocabulary development

All three groups showed an increase in mean scores with time. The first three data points show the pre-test mean raw scores of the three groups before the intervention. All three groups are labelled 'c' indicating that the difference in the mean raw scores is very small and not statistically significant at the beginning of the study (i.e. before the intervention). The second set of data points represents the post-test scores and are labelled 'a' for the Experimental Group and Control Group B and 'b' for Control Group A. This denotes that there is no statistically significant difference between the post-test scores of the Experimental Group and Control Group B, but there is a significant difference between the post-test scores of the Experimental Group and Control Group A (both from School A) and between the two control groups. The statistical analyses reported so far have been concerned with testing the null hypothesis; in other words assessing the likelihood that the difference in the PPVT-IV mean scores between the groups may have occurred by chance. This has been done by calculating a  $p$  value to determine statistical significance (Landau & Everitt, 2004).

#### **4.4.1.8 Determining the magnitude of effect size**

In addition to statistical significance, the measure of effect size must be given since “[s]tatistical significance on its own has come to be seen as an unacceptable index of effect [...] because it depends on both sample size and the coefficient” (Cohen, Manion & Morrison, 2011:616). Effect size, on the other hand, indicates the magnitude of the impact of the independent variable on the dependent variable. It indicates how large the impact of an observed finding actually is and is useful because it provides an objective measure of the importance of the effect (Cohen *et al.*, 2011). Olejnik and Algina (2000:241) argue that a statistically significant result does not automatically indicate meaningfulness as a large sample sizes can lead to small differences being statistically significant. Accordingly, Olejnik and Algina (2000:241) recommend that researchers not only test for statistical significance, but also for meaningfulness by doing an effect size test. From the effect size test a researcher will be able to determine whether the effect of the intervention was negligent (unimportant), medium or large (important).

In light of the above mentioned the researcher decided to perform an effect size test, Cohen's *d*. The meaningfulness of various effect sizes is graphically displayed in Table 22.

Table 22: Effect size scale (Thalheimer & Cook, 2002)

Size of the effect	Meaningfulness
$\geq -0.15$ and $< .15$	Negligible effect
$\geq .15$ and $< .40$	Small effect
$\geq .40$ and $< .75$	Medium effect
$\geq .75$ and $< 1.10$	Large effect
$\geq 1.10$ and $< 1.45$	Very large effect
$> 1.45$	Huge effect

Any effect size less than .15 is regarded as negligible, while an effect size of between .40 and .75 regarded as medium. A result higher than .75 is regarded as a large effect, very large and even huge effect.

The magnitude of the effect size for this study can be observed from the data in Table 23.

Table 23: Results from Cohen's *d* effect size

Cell	Treatment	Time	{1}	{2}	{3}	{4}	{5}	{6}
			21.154	49.769	19.200	33.880	24.833	46.111
1	EG	Pre		2.19 (Huge)	0.23 (Small)	1.19 (Very large)	0.44 (Medium)	2.12 (Huge)
2	EG	Post	2.19 (Huge)		2.43 (Huge)	1.12 (Very large)	1.91 (Huge)	0.24 (Small)
3	CA	Pre	0.23 (Small)	2.43 (Huge)		1.46 (Huge)	0.78 (Large)	2.43 (Huge)
4	CA	Post	1.19 (Very large)	1.12 (Very large)	1.46 (Huge)		0.89 (Large)	0.92 (Large)
5	CB	Pre	0.44 (Medium)	1.91 (Huge)	0.78 (Large)	0.89 (Large)		1.86 (Huge)
6	CB	Post	2.12 (Huge)	0.24 (Small)	2.43 (Huge)	0.92 (Large)	1.86 (Huge)	

EG = Experiential Group; CA = Control Group A; CB = Control Group B.

Each cell represents a treatment\*time combination: Cell 1 is the pre-test Experimental Group, cell 2 represents the post-test Experimental Group and the subsequent cells represent the pre- and post-test variations for Control Groups A and B. Cohen (1988) provided guidelines for interpreting effect size:  $0.15 < d < 0.4$  is small;  $0.4 < d < 0.75$  is medium;  $0.75 < d < 1.1$  is large;  $1.1 < d < 1.45$  is very large and  $d \geq 1.45$  is huge.

The effect size between the Experimental Group's post-test mean and Control Group A's post-test mean is very large, at  $d = 1.12$ ; the difference between the two means is larger than one standard deviation and shows that the result is not only significant but also important. The effect size between the Experimental Group and Control Group B's post-test scores is small, at  $d = 0.24$ , indicating that the result is not important. This is in line with the result of the *post-hoc* LSD test that found the difference between these two groups to be not significant.

The following section will now integrate the above discussions and analysis of the research data with the intention of answering the first research question regarding the effectiveness of storybook reading and interactive vocabulary instruction to increase vocabulary.

#### **4.4.1.9 Answering Research Question 1**

The analysis of the pre- and post-test PPVT-IV scores revealed a significant difference between the post-test scores of the Experimental Group and Control Group A; with the mean post-test score of the Experimental Group being significantly higher than the mean post-test score of Control Group A (refer Table 17).

Although numerous learner-related variables (refer 4.4.1.9), such as natural maturation, SES, home language and background factors, could have had an impact on the rate of vocabulary acquisition of learners throughout the school year there were no discernible significant differences between the groups at the beginning of the research study in terms of these factors (refer Table 7). Consequently, it seems reasonable to assume that the improvement in the PPVT-IV post-test scores of the Experimental Group was due to the effect of the intervention. The significant improvement in results obtained during the post-test bears testimony to the claims by authors like Ard and Beverly (2004), Justice *et al.* (2005) and Beck and McKeown

(2007) that L2 storybook reading accompanied by explicit, interactive vocabulary instruction and reader interaction leads to improved vocabulary acquisition.

It can therefore be concluded that there is enough evidence to answer Research Question 1 and prove the first hypothesis to be correct:

- Second language storybook reading, accompanied by explicit, interactive vocabulary instruction, has a positive impact on the vocabulary acquisition of Grade 1 learners.

As mentioned in the foregoing discussion, the post-test results for Control Group B were noteworthy, given that they had not received the intervention. Therefore, having answered the primary research question, and before moving on to the remaining research questions, the researcher felt it prudent to briefly take a closer look at Control Group B's results.

#### **4.4.1.10 A closer look at Control Group B's results**

As stated earlier (refer Figure 6) the quantitative data analysis not only found a significant improvement in the vocabulary of the Experimental Group, but also found that there was a significant improvement in the vocabulary of the learners in Control Group B, even though these learners were not exposed to the intervention. Even though it is not a focus of this study, the researcher felt it prudent to discuss the various factors which could have contributed to the results of Control Group B. These factors will be discussed in the following sections.

- **Maturation**

It can be argued that the improvement of the vocabulary knowledge of Control Group B is due to natural maturation since learners tend to develop or increase their vocabulary over time. However, this argument fails to explain why the learners from Control Group B outperformed the learners of Control Group A by such a large margin, given that the groups were homogenous at the beginning of the research (refer Table 7). If maturation was the only influence on vocabulary growth there would not have been a significant difference in the vocabulary growth of the learners in Control Group A and Control Group B given that neither group was exposed to the intervention. The researcher therefore had to look elsewhere for possible reasons for this difference.

Provisionally, the choice of research design, namely the mixed methods approach (using both qualitative and quantitative data), provided the researcher with valuable data and insight into issues that could have impacted on the results of Control Group B. In addition to the quantitative data in the form of the PPVT-IV test scores, the qualitative data obtained from classroom observations and the teacher interview were used to attempt to explain why Control Group B out-performed Control Group A in the PPVT-IV post-test scores, despite neither group being exposed to the intervention. In the next sections the possible reasons (other than maturation) for Control Group B's performance will be discussed.

- Instructional time for AL

An important distinction between the two control groups had to do with the teaching time allocated to English. According to the CAPS document, the instruction time for Additional Language—in this case English—is a minimum of two hours and a maximum of three hours per week (Department of Basic Education, 2011a). As stated in Section 4.2.2.13, School A (the Experimental Group and Control Group A) had decided to spend the minimum time (two hours per week) teaching English, while School B (Control Group B) spent the maximum time allocation (three hours per week) teaching English. It stands to reason that this would have had an influence on learners' English (L2) and vocabulary development. The learners in Control Group B were exposed to longer English teaching and instruction time, compared to learners from Control Group A (and the Experimental Group), and as a consequence it can be expected that Control Group B improved their English proficiency at a higher rate than that of learners in School A. Also, learners in Control Group B received regular reading and spelling homework as opposed to learners in Control Group A who received no homework. These could possibly be some of the reasons why Control Group B's PPVT-IV post-test scores improved significantly compared to Control Group A.

- Language used during AL lessons

The teacher of Control Group B exposed her class to English more often than the other two teachers. This she did by speaking English during English sessions, greeting learners in English and explaining work in English. She was also the only teacher who actively encouraged her learners to speak English (refer to 'talk time' in

Section 4.2.2.2). It is reasonable to assume that the increased use of the target language (AL) would increase learners' uptake of new vocabulary.

- Role of storybook reading

It becomes apparent from the Literature Review in Chapter 2 (Section 2.5.2) that storybook reading plays a vital role in vocabulary acquisition (Ard & Beverly, 2004). The CAPS document underscores this, stating that Foundation Phase learners must be exposed to oral language in the form of stories, rhymes, poems, songs and oral instructions (Department of Basic Education, 2011a). During the pre-intervention observation period, it was noted that one of the primary differences between the two teachers of the two control groups is that Teacher CB (Control Group B) read to her learners in the L2 while Teacher CA (Control Group A) did not. Teacher EG (the teacher of the Experimental Group) also read to her learners in the L2. It needs to be added that, although both Teacher CB and Teacher EG made use of Big Books during shared reading, Teacher CB was the only teacher who also read other English storybooks to her learners. Consequently, during storybook reading learners in Control Group B were exposed to books with more complex storylines than Big Books and, as a result to more, as well as more advanced, L2 vocabulary. According to the literature (refer 2.5.2), storybook reading plays a determining factor in the rate of acquiring new L2 words. The extent of inclusion of shared reading is therefore another possible explanation of why the learners in Control Group B outperformed the learners in Control Group A in the PPVT-IV post-test.

- Adult interaction during AL lessons

The discussion around explicit vocabulary instruction (refer 2.5.2) further indicates that it is not storybook reading alone that enhance vocabulary acquisition but, more importantly, the adult interaction that accompany the reading (Ard & Beverly, 2004). The type of interactive practices that were reported to be effective were, amongst others, asking questions, expanding on the responses learners give, explaining vocabulary, and responding both verbally and non-verbally (Ard & Beverly, 2004). Other researchers (Dickinson & Smith, 1994; Justice *et al.*, 2005; Beck & McKeown, 2007) confirm that adult mediation in the form of interactive and analytical talk during L2 reading sessions, combined with rich, focused instruction, enhances learners' language and vocabulary development and facilitates word learning. In other words,

storybook reading, combined with adult interaction - in the form of teacher-learner interaction - are more effective than simply reading aloud to learners.

The researcher noticed that Teacher CB interacted with her learners during storybook reading sessions more so than Teacher EG. Teacher CB's reading sessions contained comments and questions about the characters, vocabulary and events, while, in contrast, there was very little interaction between Teacher EG and her learners during her English reading sessions (refer Section 4.2.2.11 on storybook reading).

In contrast, Teacher CA did not read to her learners in the L2, nor did she encourage learners to contribute during English lessons. In fact, she saw learners' contributions as interruptions and, consequently, there was very little interaction between her and her learners. Of all three groups observed, Teacher CA's learners were the least willing to answer or ask questions and did not participate actively during the English lessons. In comparison, the learners from Control Group B were spontaneous and not shy to offer answers and ask questions. The interaction between teacher and learners have been proven to be conducive to vocabulary acquisition (refer 2.6.2).

- Vocabulary teaching strategies

During storybook reading the teacher of Control Group B would use teaching strategies like explicitly explaining word meaning to her learners (although limited incidences were observed), as well as making an effort to expose learners to the vocabulary multiple times during reading sessions. In addition, Teacher CB would interact with her learners and involve them in the reading process; teaching practices which, according to Elley (1989) and Hulstijn (2001), will improve word acquisition. The observation data regarding L2 teaching practices are presented in Tables 9 – 16.

In comparison, Teacher CA and Teacher EG seldom explained vocabulary explicitly and the researcher rarely observed multiple word exposures during their English lessons. According to researchers like Hulstijn (2001) and Beck and McKeown (2007), teaching strategies that lead to increased word learning are, amongst others, teaching practices used by Teacher CB such as explicit vocabulary instruction and increased exposure to words.

- Difference in socio-economic status

Apart from the influence of the teacher and the teaching practices on the post-test scores learner-related variables like socio-economic factors also need to be taken into account when examining the difference in post-test scores of the two control groups. As stated earlier (refer 3.4.2) the two schools differ in socio-economic status, with School B (and Control Group B) situated in a middle class neighbourhood and School A (Control Group A) located in a low economic income area. The consequences of the difference in SES are that learners in Control Group B have parents who are literate, involved with their children's education and expose learners to books and reading materials at home. In contrast, learners in Control Group A come from a print-poor home environment, are on a school feeding scheme and have poorly educated parents.

There is no difference in the SES between the Experimental Group and Control Group A and consequently SES is not a factor which could have caused the difference in vocabulary acquisition between these two groups. However, differences in SES and the resulting home dynamics could have had an influence on the different rate of vocabulary acquisition between Control Group A and Control Group B. These factors have been proven by research studies (Hart & Risley, 1995; Beck & McKeown, 2007) to have an influence on vocabulary and academic development. Parental talk and language interaction are linked to vocabulary development and learners from wealthy homes, where this type of language interaction takes place, know more words than their peers from poorer homes where interaction is limited. Furthermore, there is evidence that children from lower SES families build vocabulary at a slower rate than children from higher SES (Hart & Risley, 1995). The 2016 PIRLS results reflect the importance of parental encouragement with Grade 4 learners whose parents read achieving the highest mean score (359) as opposed to learners whose parents do not like to read, achieving the lowest mean score at 307 points (Howie *et al.*, 2017:10).

In summary, according to existing research (refer 2.7) about the effects of SES on vocabulary acquisition, the fact that the Control Group B learners in this study come from a higher socio-economic background could arguably have had a positive influence on their vocabulary acquisition and be considered a contributing factor as

to why the learners from Control Group B outperformed the learners in Control Group A.

Next, the qualitative data in the form of the post-intervention interview with the Experimental Group's teacher will be discussed in an attempt to cast some light on the already obtained results and attempt to answer Research Questions 3.

#### **4.4.2 Post-intervention teacher interview - qualitative data**

As mentioned in Section 4.2.3 a semi-structured interview was done with the Experimental Group teacher before the intervention. Upon completion of the intervention and the post tests, the researcher conducted a second semi structured interview with the Experimental Group's teacher to explore various aspects of the intervention. The aim of the post-intervention interview was to get feedback from Teacher EG regarding the intervention and to establish whether the intervention brought about any changes in her attitude and approach to vocabulary teaching. In other words the main purpose of the second interview was to answer Research Question 3, namely:

- What are the changes, if any, in the Experimental Group Teacher's attitudes and approach to vocabulary instruction before and after the intervention?

Accordingly, the structure of the post-intervention interview differed from the interview before the intervention. After the intervention the researcher's questions focused on Teacher EG's perception of the intervention and were aimed specifically at ascertaining how Teacher EG experienced the intervention and to find out whether it had any influence on her vocabulary teaching methods. Teacher EG was asked the following open-ended questions:

- What is your opinion regarding the vocabulary improvement of your class?
- Why do you think the class improved in L2 vocabulary knowledge?
- What is your overall impression of the intervention? Things you noticed?
- Do you think the time allocation for the storybook reading sessions were correct?
- Was there any specific vocabulary teaching technique you found valuable?
- In light of the intervention did your opinion regarding the importance of vocabulary teaching change at all?

The following section contains a summary of the main points of the semi-structured interview.

#### **4.4.2.1 Reaction to results of the Experimental Group's PPVT-IV tests**

The researcher did not discuss all the research results with Teacher EG in detail at the time of the post-test interview. However, Teacher EG was shown Table 18 (Section 4.3.1) which displays the mean raw score growth of the different groups. The table is easy to interpret and clearly shows that the Experimental Group had the biggest percentage improvement with 135.3%. This implies that, of all three groups, the learners in Teacher EG's class, the Experimental Group (which were exposed to the intervention) had the largest vocabulary growth. In the light of the results Teacher EG thought that the intervention was useful and was impressed by the results, stating that it served to affirm her notion that the teaching techniques used during the intervention are both useful and effective. Nevertheless, Teacher EG was not surprised by the vocabulary growth of her students because, during the two terms in which the storybook reading lessons occurred, she noticed an improvement in their English vocabulary. She also expressed the opinion that she thinks the vocabulary improvement was due to the intervention.

#### **4.4.2.2 Reflection on reading sessions**

In terms of the results of the post-tests, Teacher EG was satisfied and impressed with the progress her learners made, as well as her ability to incorporate storybook reading combined with the various teaching strategies into the AL lessons. She admitted that the intervention was 'eye opening' for her and continued that she found the storybook reading sessions 'easy and rewarding' and was particularly pleased with the obvious joy her learners displayed during these sessions. She reflected that learners might have enjoyed the storybook reading sessions because they have very limited exposure to stories and books as most parents do not read to their children at home. Although at first sceptical about the content of the stories – as stated in the pre-intervention interview, she thought English books other than Big Books too difficult for her learners to understand – she realised that with her input they were able to understand the stories. She now felt that she did not only have to read the enlarged L2 Big Books, but that learners are able to understand and enjoy other,

more interesting English books similar in difficulty level to the ones used in the intervention.

She herself enjoyed reading the stories in a more ‘dramatic’ way, incorporating different accents, gestures and facial expressions. According to Teacher EG, the girls were especially eager to answer questions and contribute to discussions. She also noticed that, as time went by, boys became more confident and willing to answer questions and participate, although she was unsure as to why this was the case. Overall, she was very surprised at how talkative and eager learners were to (try to) speak English - even the learners who were initially shy. She noticed that giving (positive) feedback and responding more to learners’ answers encouraged them to speak more. She intended asking learners to guess the meaning of words more often in the future, in order to involve them more actively in their own vocabulary learning. As the same texts were re-read she was pleasantly surprised at the number of words learners could remember from earlier reading sessions.

It is possible that Teacher EG gained confidence in using the various methods and strategies—which were new to her—during the intervention sessions. Researchers such as Pretorius *et al.* (2016) have identified lack of confidence in their own ability as one of the debilitating factors preventing teachers from helping learners enlarge their vocabulary. It is apparent that the teacher perceived the usefulness of the teaching strategies and acknowledged that the methods improved L2 vocabulary teaching and, ultimately, the vocabulary of her learners. This realization, in turn, could have had a positive influence on her teaching methods during the intervention.

When asked about the time allocation of the reading sessions, about twenty minutes, Teacher EG answered that she thought it was appropriate because, although learners enjoyed the storybook reading sessions it is important to keep learners interested at all times otherwise their attention starts to wane and they begin pushing and shoving and then discipline becomes a problem.

#### **4.4.2.3 Opinion regarding the importance of L2 vocabulary**

Teacher EG said that in view of her learners’ vocabulary growth and her own experience during the intervention she now recognises how important vocabulary is for L2 development and that interactive, storybook reading is an effective way to teach and build L2 oral vocabulary. This comment seemed to mark a change in

Teacher EG's attitude towards the importance of vocabulary and was in contrast with her opinion during the pre-intervention interview in which she maintained that vocabulary is not a priority in her classroom. The intervention seemed to have shown her that vocabulary knowledge is important for literacy and that in order for her learners to achieve academically in later years they need a well-developed L2 vocabulary. In general, Teacher EG seemed committed to focusing more on vocabulary development, making her English lessons more interactive and incorporating explicit learning as well as more fun, games, activities, music and storybook reading into the lessons.

#### **4.4.2.4 Answering Research Question 3**

It became evident from the semi-structured interview that Teacher EG found aspects of the intervention valuable. She acknowledged the usefulness of the methods used during the storybook reading sessions and the fact that it improved the vocabulary knowledge of her Grade 1 learners. Specifically, Teacher EG's knowledge about vocabulary teaching strategies seemed to have increased. While before the intervention, she mainly focused on explicit teaching of the words in the departmental workbook, she had learned to incorporate storybook reading in her English lessons and expose and teach her learners the vocabulary found in these stories. In addition, while before the intervention she focused mainly on phonetic instruction, she had learned to incorporate the following teaching strategies in her English lessons:

- More storybook reading during L2 lessons
- More interaction during storybook reading sessions
- Multiple exposure to the vocabulary
- Encouraging learners to guess the meaning of words
- Encouraging learners to speak more English
- Asking learners to respond physically

The list of teaching practices above corresponds with the methods Teacher EG used during the storybook reading session. Despite not being able to observe Teacher EG's lessons after completion of the intervention, the observation of her lessons during the intervention and the nature of her comments during the post-intervention interview, it seemed fair to conclude that there had been a positive change in the

Experiential Group teacher's attitude towards vocabulary teaching. Ultimately it would be fair to say that the intervention could not have succeeded without Teacher EG embracing and implementing the respective vocabulary instruction and storybook reading methods – the significant growth in her learners' post-test results clearly show that she had successfully implemented the intervention methods. Research Question 3 can therefore be answered in the positive:

- Exposure to second language storybook reading, accompanied by explicit, interactive vocabulary instruction, for Grade 1 learners had a positive influence on the attitude and perception to vocabulary instruction of the Experimental Group's Teacher.

However, it must be taken into account that data were collected from only one teacher and consequently cannot be generalized to the entire teacher population.

#### **4.5 CONCLUSION**

This chapter presented the three phases of the research. A mixed methods approach was used incorporating both quantitative and qualitative methods of data collection and analysis. Essentially, both the quantitative and qualitative research provided similar data.

The quantitative data from the PPVT-V were summarised and analysed and the findings revealed that both the Experimental and Control Group B's post-test scores increased significantly. The increase in scores of the Experimental Group was found to be a result of the L2 interactive, vocabulary instruction of the intervention. The increase in the PPVT-IV scores of Control Group B was found to be due to a combination of factors. Firstly, the teaching practices of Teacher CB (the teacher of Control Group B) contributed to the significant improvement of the vocabulary of the learners in Control Group B. Secondly, the higher SES of Control Group B had a positive influence on the vocabulary acquisition of these learners.

The qualitative data from the teacher's semi-structured interviews and the quantitative and qualitative data from the classroom observations were organized, summarised and presented. The data revealed that interactive vocabulary teaching methods result in vocabulary acquisition (as the results of Control Group B indicate) and that, in addition, the intervention resulted in a positive change in the

Experimental Group teacher's attitudes and perception towards vocabulary instruction.

The next and final chapter, Chapter 5, concludes the study and raises implications for various stakeholders, demotes the limitation of the study and suggests further possibilities of research.

## **CHAPTER 5**

### **CONCLUSION OF THE STUDY**

#### **5.1 INTRODUCTION**

This study has brought to light the vital role that vocabulary plays in overall academic achievement (refer 2.1). Learners in South Africa need a high level of literacy and a particularly well-developed English second language (L2) vocabulary in order to comprehend what they read and to achieve academically. The study has also highlighted the unfortunate fact that many South African learners in primary grades lack an adequate L2 proficiency and vocabulary, despite the fact that English often becomes the LoLT in Grade 4. Consequently, these learners are at a disadvantage and experience learning difficulties in later grades.

Having reflected upon the existing literature, (refer Chapter 2) the researcher decided to investigate the effectiveness of L2 storybook reading, accompanied by explicit and interactive vocabulary instruction, on the vocabulary acquisition of Grade 1 learners. One teacher was trained to participate in an intervention which included 30 minute interactive storybook reading sessions with the Experimental Group twice a week during the second and third school term (refer 3.7). In addition, the existing vocabulary teaching practices employed in the participating three classrooms were observed and the attitude of one Grade 1 teacher regarding vocabulary teaching methods was ascertained. In essence, the research was done in order to gain insight into methods which can be used to effectively teach additional language vocabulary to young L2 learners in the first year of their formal schooling.

The previous chapter presented an overview of the research findings. These findings are an accumulation of results based on the PPVT tests administered, the teacher's interviews and the observations made in the three classrooms. This chapter draws upon these findings and revisits the three research questions posed in the current research. In addition, it provides some insight into how these results relate to other research.

This chapter is divided into five sections. In the first part of the chapter the main findings of the study are briefly summarized before possible explanations for the findings are discussed. Sections about the limitations of the study and the

implications of the findings follow and, finally, some suggestions for further research will be offered.

## **5.2 SUMMARY AND DISCUSSION OF THE MAIN FINDINGS**

This section provides an overview of the findings of the study. The current study adds to the research base on vocabulary acquisition by analysing the effect of second language storybook reading and interactive vocabulary instruction on the vocabulary acquisition of Grade 1 learners. The central concern of the current study was to investigate the following three research questions:

- How does second language storybook reading, accompanied by explicit, interactive vocabulary instruction, impact on the vocabulary acquisition of Grade 1 learners?
- What are the existing vocabulary instruction practices in the participating Grade 1 classes?
- What are the changes, if any, in the Experimental Group Teacher's attitude and approach to vocabulary instruction before and after the intervention?

The main findings for each of the questions will be discussed in the next sections.

### **5.2.1 Research Question 1**

Research Question 1 was investigated by using a research methodology consisting of a repeated-measures design with an experimental group and two control groups, in a mixed methods approach. The statistical analysis of the scores of the vocabulary pre- and post-tests of the quasi-experiment revealed that there is a statistically significant difference between the results of the two tests; with the mean post-test score of the Experimental Group being significantly higher than the mean post-test score of Control Group A (refer Table 17). In other words, there was significant growth in the learners' vocabulary in the Experimental Group, in fact, the L2 vocabulary growth of learners in the Experimental Group was 135.5%. The pre-test scores showed no significant difference between the Experimental Group and Control Group A. These results confirm that L2 storybook reading, accompanied by explicit, interactive vocabulary instruction, significantly improved the oral vocabulary of the learners in the Experimental Group. At the same time, learners from Control Group A, having no exposure to the reading intervention, showed only a slight

increase in vocabulary knowledge, the type of increase that could possibly be attributed to maturation effects during a normal school year.

As discussed in 4.4.1.9, the PPVT-IV test scores of Control Group B indicated that there was also a significant improvement in the vocabulary of these learners, even though they were not exposed to the reading intervention (refer Table 21). Whilst not a main focus of this study, the significant difference in the scores of the two control groups was worth noting. Considering the discussion of the possible impact of a higher SES and its related positive factors on Control Group B's high score (who, like Control Group A, did not receive the intervention) one cannot help, but wonder about the significance of teachers' training, and their attitudes towards and knowledge of teaching in general and vocabulary teaching in particular. Could properly trained teachers in low SES schools negate (or at least significantly influence) the effects of poverty on literacy development? It is a question worth asking.

### **5.2.2 Research Question 2**

To further enrich the findings of the PPVT-IV tests the researcher gathered additional qualitative and qualitative data by observing the three Grade 1 teachers and their learners. The observation data were gathered in order to provide answers to Research Question 2:

- What are the existing vocabulary instruction practices in the participating Grade 1 classes?

In general, although vocabulary teaching did occur, it was mostly at a superficial level, and teachers did not seem aware of the importance of vocabulary teaching as part of language teaching, nor did they seem to have knowledge of vocabulary teaching strategies or the value of storybook reading in developing vocabulary. Although they seemed to be aware of learners' lack of sufficient vocabulary, they seemed unsure as to how to go about teaching vocabulary. Consequently, vocabulary building was often neglected.

The teachers' approach to vocabulary development seemed to take place in what Pretorius *et al.* (2016:12) call a 'lackadaisical manner.' No real planning or thought seemed to go into vocabulary teaching. The teachers from the Experimental Group and Control Group A focused mainly on word recognition (using visuals, labelling and

pointing), memorization and phonology (refer 4.2.2.8) and word meaning was often neglected. When explicit vocabulary instruction took place, explanations were frequently in the learners' home language (Afrikaans).

One teacher was, however, observed using strategies, such as expanding on responses, exposing learners to words repeatedly, and explicitly explaining word meaning. The same teacher also read to her learners in English and encouraged the use of English in class.

In general however, very little to no storybook reading was observed, and where this occurred, it did not include interactive vocabulary instruction. It seems that teachers lacked sufficient knowledge of the importance of storybook reading and vocabulary in language teaching in general, and the use of specific vocabulary teaching strategies in particular (also refer 5.4 Implications for teaching and learning).

### **5.2.3 Research Question 3**

In addition to Research Questions 1 and 2, a third research question concerning the Experimental Group teacher's attitudes and approach to vocabulary teaching was addressed. This was done partly to determine whether exposure to L2 storybook reading, accompanied by explicit, interactive vocabulary instruction, would have an influence on the vocabulary instruction practices of a Grade 1 teacher and partly to inform Research Question 1. Research Question 3 was formulated as follows:

- What are the changes, if any, in the Experiential Group Teacher's attitudes and approach to vocabulary instruction before and after the intervention?

The interviews were done before and after the intervention and, although there was no opportunity to observe the teacher in her class after the intervention (and thereby gather data as evidence), the success of the intervention and the marked increase in her learners' pre- and post-test scores are testament to the fact that her awareness of and attitude toward the importance of vocabulary teaching and implementing vocabulary teaching strategies had changed. She further acknowledged that she had not considered vocabulary an important aspect of L2 development before the intervention, and had been unaware of the vital role that vocabulary plays in academic achievement. However, during the intervention she became aware of the important role that vocabulary knowledge plays in L2 development, and she stated

her intention of continuing the implementation of the methods and strategies she had learnt during the intervention.

Similarly, although before the intervention she had made only limited use of Big Books she stated her intention to incorporate storybook reading in her classes going forward. In conjunction with explicitly teaching vocabulary she plans on including elements of the intervention's storybook reading practises like prompting learners to engage with the text by elaborating on the themes, asking questions about the characters and events and by following up on learners responses.

In addition, before the intervention Teacher EG had focused on the phonological aspect of the words and individual letter sounds. She had made use mostly of rote learning (as observed in all participating classes) but had become aware of the effectiveness of the various interactive vocabulary instruction strategies during the intervention, leading to new insights about the importance of teaching meaning in conjunction with form.

At this point it is relevant to refer back to the discussion of the CAPS document (Section 2.9.1). During the intervention Teacher EG was exposed to interactive storybook reading as an alternative (and effective) way of explicitly teaching vocabulary and this she acknowledged to be insightful.

Overall, it seems fair to say that the interviews and observation data show that the study positively influenced the beliefs of the Experimental Group's teacher regarding vocabulary teaching.

### **5.3 LIMITATIONS OF THE STUDY**

While the present study did yield positive results, there are some limitations to the study that must be acknowledged. In addition, the study was done by a first time researcher and this might be considered by some as a limiting factor.

Firstly, the number of participants could be considered relatively small. The study involved a total of 69 Grade 1 learners in three groups, which may not allow for generalizations to be made about the entire population of Grade 1 learners in South Africa. However, given the time required for the administration of the PPVT before and after the intervention, and the time limitation set on research in schools by the Department of Education, the number was deemed sufficient for this study.

Secondly, the duration of the study spanned two school terms and could be described as rather short. However, this too was constrained by the Department of Education which only allows research to take place at schools in the second and third term (the first term being set aside for learners to settle in and the fourth term dedicated to the end-of-year exams). The researcher therefore utilized the maximum time allowed by the Department of Education.

Thirdly, although the study explored the Experimental Group teacher's attitudes and approach to vocabulary instruction by means of semi-structured interviews, no classroom observations were made after the intervention. During the post-intervention interview the teacher was committed to incorporating the teaching methods used during the storybook reading sessions in her teaching going forward, but this intention or change in attitude was, however, not verified through obtaining evidence in the form of data from, for example, observations, a pre- and post-test for the teacher, etc.

The limitations mentioned above should be taken into account when evaluating the main findings of the study. Notwithstanding these limitations, the researcher believes that the study makes a contribution to the pedagogical body of knowledge relating to L2 learning in general and vocabulary acquisition in particular. Accordingly, the following section will discuss some of the pedagogical implications that can be drawn from the results.

#### **5.4 IMPLICATIONS FOR L2 TEACHING AND LEARNING**

The results of the present research confirmed that L2 vocabulary acquisition occurs during storybook reading accompanied by explicit, interactive vocabulary instruction (refer 4.4.1.9). Furthermore, the results point to the fact that the current L2 teaching methods employed in primary schools do not effectively address vocabulary development nor optimally use storybook reading as a teaching tool to enhance L2 vocabulary. Accordingly, the question that needs to be asked is: What implications do these findings have for L2 vocabulary teaching and learning?

This section presents some suggestions as to how these implications can be exploited and focuses on the CAPS document, teachers, educational authorities and how to optimize L2 vocabulary instruction.

### 5.4.1 Revise Curriculum and Assessment Policy Statements

The Curriculum and Assessment Policy Statements (CAPS) are based on the premise that home language literacy skills, competencies and knowledge can be transferred to the L2 (Department of Basic Education, 2011a:8). This is based on The Linguistic Interdependence Hypothesis (Cummins, 1979) (refer 2.6.4) which maintains that literacy constructs can be transferred from one language to another. However, in order for this transfer to be possible, learners must have an existing literacy foundation in their L1 that can promote the development of the L2 (Cummins, 1981).

The CAPS document states that Grade 1 learners ‘come to school knowing their home language’ and that they know ‘several thousand words’ in their HL and can ‘speak it fluently’ (Department of Basic Education, 2011a:8). In other words, the CAPS document assumes that L1 literacy is unproblematic. This is however, not the case (Pretorius & Mampuru, 2007:42). The results of the 2011 and 2014 Progress in International Reading Literacy Study (PIRLS) underscored South African learners’ poor reading skills (refer 2.9.2). Having studied the 2000 to 2002 Southern African Consortium for Monitoring Education Quality (SACMEQ) results, Pretorius and Mampuru (2007:39) conclude that “literacy does not happen easily for many learners in Africa.” Pretorius and Mampuru (2007:56) continue that despite the post-apartheid transformed education curriculum, which emphasizes the development of literacy in the home language, very little results have been seen in the classroom.

The reality in South African Primary schools is that learners whose L1 is an African language have poor reading abilities and literacy skills in their L1 and are not functioning at an adequate level in their home language (Pretorius, 2002:191; Howie *et al.*, 2008). Sibanda (2017) cites Lebeso and Mtapuri (2014:85), who observe that L1 literacy instruction ‘is so superficial that there is no solid foundation for the learners to build on.’ Consequently, learners have very little transferrable literacy skills to transfer from their L1 to their L2 (refer 2.6.4) as, in fact, learners from disadvantaged, rural schools have limited literacy skills in their L1 (Msila, 2011).

In addition, the Linguistic Threshold Hypothesis (Cummins, 2000) surmises that unless a certain level of language proficiency has been developed in the L2, no literacy transfer from the L1 to the L2 can take place (refer 2.6.4). Research, like the

present study, into L2 literacy development in the Foundation Phase (refer 2.9.3) present evidence that young, South African learners have poor L2 reading skills and a lack of L2 knowledge. The question therefore arises whether young learners, like Grade 1 learners, have the threshold level of L2 proficiency in order for skills transfer from L1 to L2 to take place? Looking at the results of the present study it seems safe to say this is not the case.

It would then appear that one of the core premises of the CAPS (Foundation Phase) for the development of L2, which becomes the LoLT from Grade 4 onwards and is therefore vitally important for the academic success of learners, needs to be revisited and revised. The current CAPS assumption that Foundation Phase learners have the necessary L1 literacy skills that can be transferred to second language has a debilitating effect on the development of learners' L2. For this reason the researcher is of the opinion that the CAPS need to be carefully examined by policy makers and linguists to make sure the underlying pedagogical frameworks are founded in research and accurate educational practices.

However, despite the shortcomings of the CAPS document, there are other more hands-on pedagogical practices that can be employed to improve L2 vocabulary instruction.

#### **5.4.2 Teacher knowledge about vocabulary instruction**

The results of the present study are in accordance with the literature review in Chapter 2 and indicate that L2 teachers are not always cognizant of the importance of vocabulary acquisition (refer 2.1) and, consequently, vocabulary instruction is frequently a neglected area of language teaching (Hulstijn, 2001:258; Lesaux *et al.*, 2010). In addition, teachers often have a narrow range of vocabulary teaching strategies or, if they are aware of other vocabulary teaching strategies, they are not confident in using these methods (Pretorius *et al.*, 2016:12; Sibanda, 2017). If teachers do not know the underlying pedagogical theory of vocabulary instruction there is the risk that they might use unsuitable teaching strategies.

The researcher believes that the results of the present study can help raise awareness that L2 storybook reading, accompanied by explicit, interactive

vocabulary instruction, improve the vocabulary acquisition and development of Grade 1 learners.

The implications of the study for vocabulary training are threefold:

- Firstly, it is in concurrence with the view that implicit vocabulary acquisition is not always the most effective way to teach vocabulary (refer 2.6). Instead of simply reading to learners and expecting them to passively acquire the words, it is more beneficial, as far as vocabulary acquisition and language development is concerned, to use interactive reading practices.
- Secondly, learners as young as Grade 1 (who are not necessarily very proficient in English) are able to enjoy and benefit from shared storybook reading in their L2. This is in line with the concept of Early Literacy (discussed in Section 2.8) and implies that, although teachers do not always think it important and/or do not have time to teach it, vocabulary should ideally be part of early literacy instruction.
- Thirdly, L2 teachers are not always aware of, nor able to use, the range of interactive vocabulary teaching strategies available.

In addition, the CAPS document states that in Grade 1 ‘vocabulary and grammar are learned incidentally through exposure to the spoken language’ (Department of Basic Education, 2011a:17). This implies that L2 vocabulary will be acquired automatically through oral input in the classroom. Although, incidental vocabulary learning is effective, as explained in Section 2.5.2, it is not the *most* effective way to teach vocabulary. Explicit vocabulary instruction has been proven to be more effective, but unfortunately, while the CAPS document acknowledges that Grade 1 learners struggle with vocabulary it does not clearly set out techniques teachers can implement to ensure vocabulary growth.

It is imperative that teachers are made aware of the importance of vocabulary in the development of literacy and also, the far-reaching consequences that vocabulary knowledge has for academic achievement (refer 2.2). Teachers must be reminded that, as Nation (1994:viii) declares, “a rich vocabulary makes the skills of listening, speaking, reading, and writing easier to perform”. In other words, vocabulary is a means to an end. If implicit vocabulary instruction is to be used in the Grade 1 classrooms teachers must, at the very least, be encouraged to speak English in the

L2 sessions. As observed, two of the three teachers in the present study spoke to their learners mostly in their Home Language during L2 lessons. The CAPS document states that learners should be exposed to the L2 spoken language as much as possible in order to develop listening skills, while at the same time be given the opportunity to use the language to develop speaking skills (DBE, 2011a: 10-11). Possibly, a section should be added to the CAPS explicitly stating the importance of speaking to learners in the L2 during L2 lessons.

In addition, teachers need to be trained to use interactive storybook reading specifically to teach vocabulary. Effective vocabulary teaching strategies (like the ones used in the present study) should be promoted by the Department of Basic Education. Teachers should be made aware of the value of these strategies and, if necessary, trained to use them. Ideally, intervention workshops should be held with teachers to inform them about the significance of L2 vocabulary and to familiarize them with the various vocabulary teaching strategies available. In addition, the Department of Basic education can, for example, provide a teaching model for L2 language teachers focusing on vocabulary teaching strategies, addressing the most relevant and significant aspects of vocabulary teaching. Within this L2 teaching context teachers can implement fun and interactive methods of engaging learners in acquiring vocabulary.

The researcher is of the opinion that one of the most far reaching implications of the present research results is that the appropriate and effective use of vocabulary learning strategies during the Foundation Phase can improve the vocabulary of L2 learners so as to prevent the situation where many learners have an inadequate English vocabulary and proficiency when they reach Grade 4 (Department of Basic Education, 2011a:16).

For effective vocabulary learning teachers need to be competent, well trained and familiar with vocabulary teaching strategies. By implementing the various vocabulary teaching strategies and creating favorable learning conditions for both explicit and implicit vocabulary learning, teachers will increase learners' depth of vocabulary and lexical fluency. If these methods are used in consecutive grades, starting at Grade 1 or at pre-school, it can help L2 learners with successful long-term vocabulary development.

### **5.4.3 Increase learners' exposure to reading material**

Like many South Africa schools, neither of the research schools had a school library. There were also no visible books in School A's classrooms. Learners are consequently not exposed to additional print other than their prescribed books and have almost no access to books and reading material, neither in school nor at home (refer 4.2.2.10). The class in School B had a reading corner in their classroom and were encouraged to 'read' or page through these books.

Pretorius and Mampuru (2007:56) write about the importance of exposure to reading material for the development of literacy, explaining that learners need to read in order to develop literacy, and in order to read, learners need to be exposed to print material. However, in South Africa the majority of learners come from an oral literature tradition (Pretorius, 2002:190) and are not exposed to reading material at a young age since reading is not an integral part of the learners' culture and home environment. Consequently, young learners grow up without books and print based reading material (Pretorius & Mampuru, 2007; Howie *et al.*, 2008). Because of this, young learners often have low vocabulary levels and struggle to learn to read.

The lack of reading material in rural, disadvantaged schools thus seems to have a debilitating effect on the vocabulary and literacy development of Grade 1 (and Foundation Phase) learners in these schools. In order to develop L2 vocabulary and literacy every effort should be made to give all learners access to reading material – both in the L1 and the L2. A text-rich classroom environment will be a good starting point. Unfortunately, the effected schools are often situated in poor areas where parents pay little or no school fees and the schools are under resourced and crowded. Consequently, no funds are available to buy (additional) books and reading material. Hence, although the answer to the problem of a lack of reading material seems quite obvious at first – buy more books – on closer examination the situation is more complex and not so easily resolved. Buying books will have financial and budgeting implications and will need to be addressed by the individual schools and the Department of Basic Education.

One way forward is for schools to join forces with local or national public libraries and national and international NGOs. One such NGO is the READ Educational Trust which run classroom libraries and literacy projects in disadvantaged community

schools (Montagnes, 2000). The impact of classroom libraries is demonstrated by the fact that learners from classrooms with libraries outperform control school learners from schools without READ libraries “with as much as 189 per cent, and were ahead by 18 months in reading scores” (Montagnes, 2000:28). The 2016 PIRLS study further underscores the importance of school libraries with Grade 4 learners who attended schools without school libraries, on average, achieving lower scores (Howie *et al.*, 2017:7). In the rest of Africa countries have come up with creative ways to address the problem. In Zimbabwe, for instance, donkey cart mobile libraries are used to transport library books to rural areas and, in Botswana, Village Reading Rooms were established to extend library services to rural areas (Montagnes, 2000).

Another way in which the lack of reading material in South African societies can be addressed, according to Makotsi (2004) is to initiate a similar scheme like the UK “Bookstart” programme. In this programme, resulting from the UK government’s recognition of the key role books play in literacy, every 9 month old baby receives free books when visiting a health care practitioner. “Bookstart” has produced good results with children on the pilot programme outperforming their peers in baseline assessments (Makotsi, 2004). Makotsi (2004:5) therefore argues, correctly in the opinion of the researcher, that “[i]f books can have such an impact on educational attainment in the UK, where information is so plentiful, the impact is likely to be greater in sub-Saharan Africa, where learning resources are so scarce.”

The bottom line is that regardless of financial restraints, the government and Department of Education need to be committed to developing a literate society. As discussed above, there are alternative ways to address the lack of resources and reading material in disadvantaged and rural schools and create communities in which literacy can thrive.

## **5.5 RECOMMENDATIONS FOR FURTHER RESEARCH AND PRACTICAL APPLICATION**

It is the nature of research to give rise to further questions that require investigation. This study has shown the value of interactive, storybook reading in improving L2 vocabulary. However, this research was exploratory in nature and continued research into ways teachers can most effectively introduce and teach L2 vocabulary

is vital for the development of early vocabulary learning. In this respect, the discussion of L2 language education in the South African context (refer 2.9) made it apparent that research into how best to teach and develop a second language is an essential and relevant aspect of education planning in South Africa (Taylor & Coetzee, 2013.).

Similar studies, but with larger sample sizes and school selections, would be of great benefit, since it would allow for the generalization of the findings to a wider population. Changing the sample in terms of age group, SES and learners' backgrounds might also lead to new and interesting insights. In addition, it might also be beneficial to consider a longitudinal study and investigate whether any long-term vocabulary gains are achieved.

The researcher is of the opinion that more South African research needs to be done to investigate the impact of the various social, economic and cultural factors influencing language teaching especially in the poorer, rural schools.

Although the PPVT-IV used in the present study is considered highly reliable and valid (Dunn & Dunn, 2007) it nevertheless only assesses receptive vocabulary. Researchers may seek to address this limitation. In future research, it might be beneficial to assess whether interactive, storybook reading improves receptive and *productive* aspects of vocabulary knowledge. A different standardized vocabulary test (described in 2.2.1) will involve different types of assessments tasks and thus assess learners' vocabulary knowledge differently. Using different assessment methods will enable the researcher to look at L2 vocabulary acquisition from a different angle and consequently shed more light on L2 vocabulary acquisition.

As far as the appropriateness of the PPVT-IV as a vocabulary assessment tool for the South African context is concerned, the researcher made a few interesting observations. In the course of the administering the PPVT-IV, the researcher pronounces a stimulus word which has a corresponding image plate containing four images (refer 3.5.1 and Figure 1 – an example of an image plate containing a stimulus word and four images). One of images best matches the meaning of the stimulus word. The test subject is shown the image plate containing the four numbered images, and has to match the vocabulary word spoken by the researcher with the correct image. However, the researcher noticed that some of the English

stimulus words are phonetically similar to their Afrikaans equivalents. As stated earlier (Table 3) 67 of the 69 learners participating in the study were Afrikaans First Language speakers. An example of this phonetic correlation can be seen on Image Plate 1 the four pictures are: a rose, a ball, a pumpkin and a parrot. The stimulus word is ball, but ball sounds very similar to the Afrikaans word 'bal' and consequently about 99 % of learners got this correct. Admittedly this was the first, and easiest image plate, but in Image Plate 10 the stimulus word is bus (very similar to the Afrikaans word 'bus'), in Image Plate 15 it is drum (Afrikaans drom), and in Image Plate 25 the stimulus word is dancing, and in Afrikaans it is dans, Image Plate 28 is lamp (Afrikaans lamp) and in Image Plate 45 the stimulus word is net (Afrikaans net). The researcher noticed that inevitably test subjects scored higher on the image plates if they could use the Afrikaans equivalent to understand the English word. It is the researcher's opinion that these phonetic similarities indirectly inflated some of the learners PPVT-IV scores. Conversely, on Image Plate 30, the stimulus word is fence, but the image plate also contains a pictures of a window (venster in Afrikaans). When the researcher said 'fence' about 70 % of learners pointed to the window, because 'fence' is phonetically similar to 'venster'. In this case the phonetic similarities had influenced some of the learners' PPVT-IV scores negatively.

Other anomalies the researcher noticed were in Image Plates 34 and 64, where the stimulus words were 'castle' and 'knight' respectively. These vocabulary words are not in the frame of reference of the Grade 1 learners that took part in the research and might not be culturally appropriate for the South African context. The stimulus word in Image Plate 14 is the American term 'cookie' and the images are a cupcake, a waffle, a biscuit and a pie. In South Africa the term 'cookie' is not commonly used and the word 'biscuit' is often used for what Americans refer to as a 'cookie'. In addition, a cupcake can, in South Africa also be a cookie, or 'koekie' in Afrikaans. Overall the learners found Image Plate 14 confusing and often hesitated or, once they have answered, changed their opinion. The subjects in the research study did not proceed further than Set 6, but these were the incongruities found by the researcher in the first few Image Sets. The observations regarding the appropriateness of the PPVT-IV underscore the need to develop a tool to assess L2 receptive vocabulary that is more suited to the South African language landscape.

In sum, researchers should continue to investigate interactive, storybook reading and other instruction methods from different perspectives to try to determine the various teaching strategies that could lead to more effective ways of word learning.

## **5.6 CONCLUSION**

The primary aim of the present study was to investigate the effect of storybook reading and interactive vocabulary instruction on the L2 vocabulary acquisition of Grade 1 learners. The research results reveal that the L2 word knowledge of the Experimental Group increased significantly when learners were exposed to explicit and interactive vocabulary teaching in the context of storybook reading. Interactive, L2 storybook reading is therefore an effective vehicle to enhance L2 vocabulary acquisition.

The secondary aim of the research was to look at existing vocabulary teaching practices and to investigate whether exposure to the intervention will have an effect on the Experimental Group teacher's approach to vocabulary instruction. As far as this aim is concerned, it was found that in some instances teachers do use interactive, explicit vocabulary teaching practices, but in most cases they do not. However, the Experimental Group's teacher acknowledged the usefulness of the methods used in the intervention and the fact that it improved the Grade 1 learners' vocabulary knowledge. It was noted that there was a definite and positive change in the Grade 1 teacher's attitude towards vocabulary teaching.

Furthermore, the study highlights the low level of literacy in (especially) rural societies and schools in South Africa. This problem cannot be addressed in isolation. Education does not take place in a vacuum, and any strategy to enhance vocabulary and literacy must be a holistic endeavor, taking the various socio, economic, cultural and political challenges into consideration. Nevertheless, emphasizing the key role that reading plays within literacy development seems to be an obvious place to start. As a society, South Africans need to aspire not only to be lifelong learners, but more importantly, lifelong *readers*.

In conclusion, the present study makes a contribution to second language vocabulary research in the Foundation Phase in South African schools and generates information regarding L2 vocabulary teaching practices in Grade 1 classrooms.

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## Appendix 1: Observation sheet – Teachers

### Classroom Observation Sheet

Name of Teacher : \_\_\_\_\_

School & Grade : \_\_\_\_\_

Date : \_\_\_\_\_

	Yes	No	Seldom
<b>A General classroom management</b>			
<b>1. The teacher plans effectively and sets clear objectives that are understood</b>			
a. Objectives are communicated clearly at the start of the lesson.			
b. Expectations are formulated clearly.			
c. There is structure to the lesson.			
d. The lesson is reviewed at the end.			
<b>2. The teacher shows knowledge and understanding</b>			
a. Teacher has thorough knowledge about the subject content covered in the lesson.			
b. Instruction materials are appropriate for the lesson.			
c. Lesson is made relevant and interesting for learners.			
<b>3. Teaching methods used enable all students to learn effectively</b>			
a. The lesson is linked to previous teachings.			
b. The ideas and experiences of the students are drawn upon.			
c. A variety of activity and questioning techniques are used.			
d. Instructions and explanations are clear and specific.			
e. High standards of effort and accuracy are encouraged.			
<b>4. Learners are well behaved and managed</b>			
a. Learners know what is expected of them.			
b. Prompt action is taken to address poor behaviour.			
c. All learners are treated fairly.			
<b>B AL teaching practices</b>			
<b>5. Vocabulary is taught during other content subjects</b>			
a. Daily			
b. Seldom			
c. Never			
d. Explicitly			
e. Based on context			
<b>6. Teachers use of AL during the AL period</b>			
a. Speaks English to learners			
b. Use age appropriate English			
c. Encourages learners to speak English			
d. Reads to learners in English			
<b>7. Vocabulary is taught:</b>			
a. Implicitly			
b. Explicitly			

	Yes	No	Seldom
<b>8. The teacher's response to learners' class contributions</b>			
a. Acknowledges useful contributions.			
b. Praises appropriate answers and/or behaviour.			
c. Correct learners with sensitively.			
d. Clarify and elaborate on learners' responses.			
<b>9. Learners' response during AL lessons</b>			
a. Participate in lesson			
b. Speak English			
c. Understand simple questions			
d. Ask questions			
e. Attentive and focused			
f. Indicate that they understand			
g. Can complete worksheets about the lessons			
<b>10. Explicit vocabulary teaching</b>			
a. Learner friendly explanations			
b. The teacher explains words explicitly			
c. Explain words in Afrikaans			
d. Conceptual vocabulary like shapes and sizes are build			
e. Check word understanding			
f. The teacher reads to the learners			
g. The teacher uses a variety of activities to accommodate different learning styles.			
h. Unfamiliar words/terminology are noted and written on the black board			
i. Examples that are familiar to learners			
j. Synonyms			
k. Drawing connections between the word and real life situations			
l. By using the context in which the word is used			
m. Word discussion			
<b>11. Teacher uses visual resources like</b>			
a. Pictures in the textbook			
b. Flashcards			
c. Posters			
d. Draws pictures on the board			
<b>12. Phonetic instruction</b>			
a. The teacher makes use of rote learning			
b. Learners are given word lists to memorize			
c. The teacher uses rhymes and action songs to build vocabulary			
d. Focus on phonetics			
e. Clap out syllables			
f. Learners chant words			
<b>13. Incidental vocabulary learning</b>			
a. DVDs			
b. Songs			
c. Rhymes			

<b>C Storybook reading</b>	Yes	No	Seldom
<b>14. During storybook reading sessions vocabulary is taught</b>			
a. Not at all			
b. Implicitly			
c. Explicitly			
<b>15. During storybook reading sessions:</b>			
a. The teacher makes use of enlarged texts like 'Big Books' for reading and vocabulary teaching			
b. Illustrations are discussed			
c. The reading materials capture the interest of the learners.			
d. The story line is clear and simple, with repetitive language			
e. The teacher asks simple questions about the story, e.g. 'Who...?', 'What...?', 'Where...?'			
f. The teacher asks questions in the learners' home language			
g. Are able to answer simple, literal questions about the story			
h. Are able to identify objects, like dog, old man, in the pictures			
i. Are able to draw pictures capturing the main idea of the story			
<b>D Vocabulary instruction during storybook reading sessions</b>			
<b>16. During storybook reading sessions the teacher effectively:</b>			
a. Introduces new words			
b. Asks learners to repeat difficult words			
c. Pronounces words correctly			
d. Checks for understanding			
e. Uses engaging body language, tone and volume			
f. Conveys enthusiasm for the text			
g. Uses visual aids			
h. Communicates clearly			
i. Asks open-ended questions			
j. Speaks clearly, using age appropriate language			
k. Provides information about word with minimal disruption of the reading			
l. Actively involves learners			
m. Uses examples that are related to the passage.			
n. Uses synonyms			
o. Encourages learners to guess the meaning of words			
p. Encourages learners to look for contextual clues to guess the meaning			
<b>17. During storybook reading session learners:</b>			
a. Volunteer to answer questions			
b. Participate actively			
c. Are attentive and focused			
d. Ask questions			
e. Nod and indicate that they are listening with understanding			
f. Are able to understand simple, literal questions about the story			
g. Are able to identify objects like dogs or an old man, in the pictures			

**Structure of AL lessons:**

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**Choice of vocabulary words:**

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**Workbooks used:**

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**Additional comments:**

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## Appendix 2: Teacher's interview questions

Teacher's pseudonym \_\_\_\_\_

Date \_\_\_\_\_

- 1) How many years have you been teaching?
- 2) How important do you consider vocabulary in language learning and teaching?
- 3) Do you think it is important/necessary to teach L2 vocabulary to Grade 1 learners? Please motivate/elaborate on your answer.
- 4) Do you incorporate explicit vocabulary instruction in your English lessons? If yes how do you do this? If no what type of vocabulary instruction do you use, if any?
- 5) Please name any kind of methods or strategies you use to teach vocabulary?
- 6) How do you choose the vocabulary words that you teach?
- 7) Do you use vocabulary lists to drive your vocabulary teaching?
- 8) Tell me what you understand under "Tiers of Vocabulary" instruction.
- 9) Do you teach vocabulary during other content subjects?
- 10) Do you read English aloud to your learners? If so, how often? Once a day? Twice a week?
- 11) What is your motivation to read aloud to learners?
- 12) What do you focus on during the reading?
- 13) Do you incorporate vocabulary instruction during the reading sessions? If so, do you explicitly teach vocabulary?
- 14) If yes, please tell me about any tools or strategies you use that were not previously mentioned.
- 15) Is there anything about the value of reading and vocabulary teaching you would like to add?
- 16) Tell me how you assess learners on the vocabulary you have taught.
- 17) What are your concerns regarding the overall English proficiency of your Grade 1 learners?
- 18) Is there anything else you would like to add?

### Appendix 3: Ethical clearance form

Department of Linguistics and Modern Languages  
09 December 2014

Ref: AL\_LVDB21\_2014

Dear Mrs Van den Berg

**Registered MA student: Mrs L Van den Berg (8762376)**

**Proposed title:**

*The effect of second language storybook reading and interactive vocabulary instruction on the vocabulary acquisition of Grade 1 learners*

The Ethics subcommittee of the Department of Linguistics and Modern Languages hereby approves your proposed research study and your abidance with ethical principles and procedures, as set out in the **Research Proposal Ethical Clearance Form** in Appendix 6 of MLINALL Tutorial Letter 2014, submitted to the subcommittee on 08 December 2014.

- The approval applies strictly to the protocols as stipulated in your application form.
- Should any changes in the protocol be deemed necessary during the proposed study, then you must apply for approval of these changes to the Linguistics Ethics subcommittee.

The date of the approval letter indicates the first date that the project may officially be started.

On behalf of the Linguistics Ethics subcommittee, I wish you everything of the best with your research study. May it be a stimulating journey!

Please do not hesitate to contact us should you have any further enquiries or requests for assistance.

Yours sincerely

Prof EJ Pretorius  
Chair: Higher Degrees Committee and Ethics subcommittee  
Department of Linguistics and Modern Languages

## Appendix 4: Letter of approval from the Western Cape Department of Education



[Audrey.wyngaard@westerncape.gov.za](mailto:Audrey.wyngaard@westerncape.gov.za)

tel: +27 021 467 9272

Fax: 0865902282

Private Bag x9114, Cape Town, 8000

wced.wcape.gov.za

**REFERENCE:** 20141210-41452

**ENQUIRIES:** Dr A T Wyngaard

Mrs Lenore Van den Berg



**Dear Mrs Lenore Van den Berg**

### **RESEARCH PROPOSAL: THE EFFECT OF INTERACTIVE VOCABULARY INSTRUCTION AND READING ON GRADE 1 LEARNERS' VOCABULARY ACQUISITION**

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators' programmes are not to be interrupted.
5. The Study is to be conducted from **22 January 2015 till 30 September 2016**
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
7. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
8. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
9. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
10. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
11. The Department receives a copy of the completed report/dissertation/thesis addressed to:

**The Director: Research Services  
Western Cape Education Department  
Private Bag X9114  
CAPE TOWN  
8000**

We wish you success in your research.

Kind regards.

Signed: Dr Audrey T Wyngaard

**Directorate: Research**

**DATE: 11 December 2014**

## Appendix 5: Letter to the principal

29 October 2014

The Principal



Dear Sir

### **REQUEST FOR COOPERATION IN AN ACADEMIC RESEARCH PROJECT**

Your school has been selected to participate in a research study for obtaining a Master's degree in the Department of Applied Linguistics & Modern Language at the University of South Africa (UNISA). The purpose of the study is to explore the effectiveness of second language vocabulary instruction in Grade 1.

If you volunteer to participate in this study, I would like to interview and observe both Grade 1 teachers. The study will involve pre- and post-tests for all Grade 1 learners and one Grade 1 teacher and class (of your choice) will further be involved in a vocabulary intervention involving interactive storybook reading.

This study does not entail any risks, discomforts or inconveniences. The intervention will form part of the participating teacher's everyday teaching activities, and the interview will be conducted anonymously. The learners' tests will be conducted by the researcher during school hours on the school premises at a time agreed to be you and the teachers. Any information obtained in connection with this study will remain confidential and only be available to the researcher. In the final version of the thesis or any report or journal article intended for publication, generic descriptors for persons (teachers) and organizations (schools) will be used to ensure anonymity.

A copy of the formal results of the research project can be made available to you upon request.

We look forward to your positive response. Please do not hesitate to contact me if you have questions about this project.

Yours sincerely

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**Mrs L van den Berg**

## Appendix 6: Informed consent form - Teachers

### UNIVERSITY OF SOUTH AFRICA CONSENT TO PARTICIPATE IN RESEARCH

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#### Consent form for teachers

*The effects that second language storybook reading and interactive vocabulary instruction have on the vocabulary acquisition of Grade 1 learners.*

You have been selected to participate in a research study conducted by Lenore van den Berg from the University of South Africa (UNISA). The results of the research will contribute to a Master's thesis. You were selected as a possible participant in this study because your school suits the criteria for the research and is located close to where the researcher lives and works.

#### **1. PURPOSE OF THE STUDY**

The purpose of the study is to investigate the effects of interactive storybook reading on the second language vocabulary acquisition of Grade 1 learners. The study is linked to objectives and outcomes in the 2012 Curriculum and Assessment Policy Statement (CAPS) for Grades R – 3 as set out by the South African Department of Basic Education.

#### **2. PROCEDURES**

If you volunteer to participate in this study, we would like you to use the storybook reading and vocabulary instruction methods in the classroom. You will receive training and support. In addition, we would like to observe you in the classroom and conduct a short interview with you. The observation and interview are solely for obtaining information for part of the study. The information will only be available to the researcher for research purposes. The observations and interview will be conducted by the researcher directly with the teachers after obtaining permission from the school principal.

#### **3. POTENTIAL RISKS AND DISCOMFORTS**

This study does not entail any risks, discomforts or inconveniences. The intervention will form part of your everyday teaching, and the interview is conducted anonymously and requires no details which can be linked to individuals or schools.

#### **4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY**

The potential benefit(s) of the research for teachers are as follows:

- Learning about and implementing interactive storybook reading techniques.

#### **5. PAYMENT FOR PARTICIPATION**

No payment will be made for participation in this study.

#### **6. CONFIDENTIALITY**

Any information that is obtained in connection with this questionnaire will remain confidential and only be available to the researcher. Confidentiality will be maintained by storing all information in a secure place, whether in hard-copy or electronic format. In the final dissertation and any report intended for publication, generic descriptors for persons (teachers) and organizations (schools) will be used to ensure anonymity. The researcher and her direct supervisor are the only persons who will

have access to all information. Information will not be released to any party unless they have a legal right to it.

**7. PARTICIPATION AND WITHDRAWAL**

You can choose whether to participate in this study or not. If you agree to participate in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

**8. IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about the research, please feel free to contact Lenore van den Berg (the researcher) by phone at 082 9463398, or via email at Lenore.vandenberg@mandela.ac.za. Alternatively her supervisor, Dr Nanda Klapwijk can be contacted at (012) 429-2403 or 082 461 1410.

**9. RIGHTS OF RESEARCH SUBJECTS**

You may withdraw your consent at any time and discontinue your participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact the study supervisor (see 8 for contact details).

**SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE**

I declare that I understand the information described above, and have been given the opportunity to question the researcher and/or principal about the information described above in the language of my choice. Any questions that I had have been answered to my satisfaction.

I hereby consent to participate in this study. I have been given a copy of this form.

\_\_\_\_\_  
**Name of Subject/Participant**

\_\_\_\_\_  
**Name of Legal Representative (if applicable)**

\_\_\_\_\_  
**Signature of Subject/Participant or Legal Representative**

\_\_\_\_\_  
**Date**

**SIGNATURE OF INVESTIGATOR**

I declare that I gave the participants the opportunity and time to ask me any questions pertaining to this study. I also explained the information in this document to the school principal. He was encouraged and given ample time to ask me any questions. This conversation was conducted in \_\_\_\_\_ and no translator was used.

\_\_\_\_\_  
**Signature of Investigator**

\_\_\_\_\_  
**Date**

## **Appendix 7: Informed consent form - Parents**

### **UNIVERSITY OF SOUTH AFRICA CONSENT TO PARTICIPATE IN RESEARCH**

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#### **Parental Consent Form for Learners**

*The effects that second language storybook reading and interactive vocabulary instruction have on the vocabulary acquisition of Grade 1 learners.*

Your child has been selected to participate in a research study conducted by Lenore van den Berg through the University of South Africa (UNISA). *This study has been approved by the Western Cape Education Department and your child's school.* The results of the research will contribute to a Master's thesis.

#### **1. PURPOSE OF THE STUDY**

The purpose of the study is to investigate the effects of interactive storybook reading on the second language vocabulary acquisition of Grade 1 learners. The study is linked to objectives and outcomes in the 2012 Curriculum and Assessment Policy Statement (CAPS) for Grades R – 3 as set out by the South African Department of Basic Education.

#### **2. PROCEDURES**

If your child volunteers to participate in this study, we would ask him/her to write a standard vocabulary assessment. The assessments are solely for obtaining information for the study. The assessment results will not form part of the child's school record in any way and will not influence their school mark in any way. No public comparison will be made between learners, and the results of the assessments will only be available to the researcher for research purposes. The assessments will be administered by the researcher, who is an English second language lecturer. All assessments will take place at the child's school. The test will be administered twice: once before the start of the research to determine the learners' starting vocabulary levels, and once upon completion of the research.

#### **3. POTENTIAL RISKS AND DISCOMFORTS**

This study does not entail any risks, discomforts or inconveniences. All tests are similar to reading tasks performed in schools every day. All observation visits and interactions with learners will be done by prior appointment with and permission from the school principal. There will be no disruption of normal class activities.

#### **4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY**

The potential benefits of the research for learners are as follows:

- Exposure to increased reading activities in class
- Exposure to increased vocabulary-building activities in class
- The potential for improving their overall vocabulary levels.

#### **5. PAYMENT FOR PARTICIPATION**

No payment will be made for participation in this study.

#### **6. CONFIDENTIALITY**

Any information that is obtained in connection with this study will remain confidential and only be available to the researcher. Confidentiality will be maintained by storing all information in a secure place, whether in hard-copy or electronic format. In the final thesis and any report intended for publication, generic descriptors for persons

(teachers & learners) and organizations (schools) will be used to ensure anonymity. The researcher and her direct supervisor are the only persons who will have access to all information. Information will not be released to any party unless they have a legal right.

### **7. PARTICIPATION AND WITHDRAWAL**

You can choose whether your child participates in this study or not. If you agree to your child's participation in this study, you may withdraw your child at any time without consequences of any kind. Your child may also refuse to answer any questions they don't want to answer and still remain in the study. The researcher may withdraw your child if circumstances arise which warrant it.

### **8. IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about the research, please feel free to contact Lenore van den Berg (the researcher) by phone at 082 9463398, or via email at Lenore.vandenberg@mandela.ac.za. Alternatively her supervisor, Dr Nanda Klapwijk, can be contacted at (012) 429-2403 or 082 461 1410.

### **9. RIGHTS OF RESEARCH SUBJECTS**

You may withdraw your consent at any time and discontinue your child's participation without penalty. You are not waiving any legal claims, rights or remedies because of your child's participation in this research study. If you have questions regarding your rights as a research subject, contact the study supervisor (see 8 for contact details).

<b>SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE</b>
--

I declare that I understand the information described above, and have been given the opportunity to question the researcher and/or principal about the information described above in the language of my choice. Any questions that I had have been answered to my satisfaction.

I hereby consent to participate in this study. I have been given a copy of this form.

\_\_\_\_\_  
**Name of child (Subject/Participant)**

\_\_\_\_\_  
**Name of Legal Representative (Parent or Guardian)**

\_\_\_\_\_  
**Signature of Legal Representative (Parent or Guardian)**

**Date** \_\_\_\_\_

<b>SIGNATURE OF INVESTIGATOR</b>
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I declare that I gave the participant's parent/guardian the opportunity and time to ask me any questions pertaining to this study. I also explained the information in this document to Mr. Strydom. He was encouraged and given ample time to ask me any questions. This conversation was conducted in \_\_\_\_\_ and no translator was used.

\_\_\_\_\_  
**Signature of Investigator**

\_\_\_\_\_  
**Date**

## Appendix 8: Informed consent form - Learners

**IMPORTANT: the information in this Assent Form will be read and explained VERBALLY to the participants in their home language, who will then write their name or make a mark on the signature line.**



### PARTICIPANT INFORMATION LEAFLET AND ASSENT FORM



#### **TITLE OF THE RESEARCH PROJECT:**

The effect of second language storybook reading and interactive vocabulary instruction on the vocabulary acquisition of Grade 1 learners (in simpler language: If reading stories in English and teaching English words will make a difference in the English words Grade 1 learners learn).

**RESEARCHER'S NAME:** Lenore van den Berg

**CONTACT NUMBER:** 082 9463398

#### **What is this research project all about?**

This research is about how we learn difficult and strange English words. If we can find out how learners learn these words we can work out lessons and plans that will make it easier for all the Grade 1 learners to learn English words. So in the research we will read English stories and look at different English words.

#### **What will I have to do in this study?**

You will not have to do anything different or difficult in the research. Your teacher or I will read stories to you in English and you will just have to listen and talk as you normally do in your classroom.

**What if I do not want to do this?**

You do not have to take part in the research. If you do not want to you can just say so to me or to your teacher.

Do you understand this research study and are you willing to take part in it?

 YES NO

Has the researcher answered all your questions?

 YES NO

Do you understand that you can stop taking part in the study at any time?

 YES NO

Name of child

Date

---

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**Thank you**

Appendix 9: Example of observation sheet and researcher's notes

seems 1 day L1 & next day d2  
reads in d2

did NOT read books more than one

C Storybook reading + Big Books		Yes	No	Seldom
14.	During storybook reading sessions vocabulary is taught			
a.	Not at all			
b.	Implicitly (when reading kids hear words?)	✓		
c.	Explicitly	✓		
15.	During storybook reading sessions:			
a.	The teacher makes use of enlarged texts like 'Big Books' for reading and vocabulary teaching in L2	✓		
b.	Illustrations are discussed	✓		
c.	The reading materials capture the interest of the learners.	✓		
d.	The story line is clear and simple, with repetitive language	✓		
e.	The teacher asks simple questions about the story, e.g. 'Who...?', 'What...?', 'Where...?'	✓		
f.	The teacher asks questions in the learners' home language	✓		
g.	Are able to answer simple, literal questions about the story	✓		
h.	Are able to identify objects, like dog, old man, in the pictures	??		
i.	Are able to draw pictures capturing the main idea of the story	??		
D Vocabulary instruction during storybook reading sessions				
16.	During storybook reading sessions the teacher effectively:			
a.	Introduces new words	✓		
b.	Asks learners to repeat difficult words	✓		
c.	Pronounces words correctly (mostly)	✓		
d.	Checks for understanding			
e.	Uses engaging body language, tone and volume	✓		✓
f.	Conveys enthusiasm for the text	✓		
g.	Uses visual aids - posters - cards	✓		
h.	Communicates clearly (she is not 100% of the time)	✓		
i.	Asks open ended questions (repeats)	✓		
j.	Speaks clearly, using age appropriate language	✓		
k.	Provides information about word with minimal disruption of the reading	✓		
l.	Actively involves learners (she seems to)	✓		
m.	Uses examples that are related to the passage. (often)	✓		
n.	Uses synonyms (not really)		✓	
o.	Encourages learners to guess the meaning of words			✓
p.	Encourages learners to look for contextual clues to guess the meaning			✓
17.	During storybook reading session learners:			
a.	Volunteer to answer questions	✓		
b.	Participate actively	✓		
c.	Are attentive and focused	✓		
d.	Ask questions	✓		
e.	Nod and indicate that they are listening with understanding	✓		

They enjoy reading sessions

did not see this

not enough

only because I am present

How does she choose books?

Paramant

seems to enjoy reading

1831

20 1 3

good vocab teaching practices => vocab acq?

Central group 5

DBS.

children not asked to retell story

this could help with vocab

f. Are able to understand simple, literal questions about the story	yes		
g. Are able to identify objects like dogs or an old man, in the pictures	✓		

Structure of AL lessons:

are quite good @ this - seems to enjoy it

A lot of group work

Circle on mat - all kids sit on mats - hello weather today?

Good discipline in class, kids well behaved & listens (small class) Good discipline

Math also in small groups But mainly reading - kids read 2-2 in group

Teaching in themes - also for L2 Topic of the day/week

(This is from workbook)

Learning objectives unclear

Choice of vocabulary words:

± 15 min

Learners have "talk time" - are allowed to talk & encouraged to speak English (can only speak Eng) how are words chosen??

Parents given word list each week - discuss words - where does vocab come from? Lists from workbook

Additional word list are given - learners chat/repeat/recitation words - must memorize for test - they must spell words

Workbooks used:

government prescribed books - seems well set out, words with context

Vocab words in books | Text books - e.g. Body parts + good illustrations L2 Voc lists from Joe book

Grade 1 English First Additional Language workbook

Kids seem involved in class learning

Additional Comments: No school library / schools has camp room

There are books in the classroom - books parents gave + previous kids.

Kids are allowed to pass/read books after work is finished

→ a word rich environment

Parents = middle class, can all read, Books, TVs & Computers @ home. → influence of SES?

Vocabulary teaching strategies

LoLT: aft.



School higher

## Appendix 10: Distribution of school statistics across wealth quartiles (Spaull, 2012:7)

**Table 1: Distribution of Various Schooling Statistics across School Wealth Quartiles (Grade 6 - SACMEQ III)**

Category	Variable	School Wealth Quartiles				Total	Quartiles relative to national average				Total
		1	2	3	4		1	2	3	4	
Performance	Reading score	430.5	457.8	474.0	623.7	<b>494.9</b>	-13%	-8%	-4%	26%	0%
	Mathematics score	450.9	467.1	470.7	593.8	<b>494.8</b>	-9%	-6%	-5%	20%	0%
	Proportion functionally illiterate <sup>4</sup>	43.3%	33.3%	25.6%	4.1%	<b>27.3%</b>	59%	22%	-6%	-85%	0%
	Proportion functionally innumerate	56.9%	48.6%	44.8%	8.4%	<b>40.2%</b>	42%	21%	12%	-79%	0%
	Reading teacher reading score	731.8	738.9	732.9	827.0	<b>757.7</b>	-3.4%	-2.5%	-3.3%	9.1%	0%
	Maths teacher mathematics score	719.6	729.1	751.7	863.5	<b>763.6</b>	-5.8%	-4.5%	-1.6%	13.1%	0%
Textbooks	Has own reading textbook	34.4%	42.3%	38.2%	66.1%	<b>45.0%</b>	-24%	-6%	-15%	47%	0%
	Has own mathematics textbook	27.6%	35.8%	32.3%	50.9%	<b>36.4%</b>	-24%	-2%	-11%	40%	0%
School factors	Gets homework "Most days of the week"	49.9%	52.1%	46.1%	75.8%	<b>56.1%</b>	-11%	-7%	-18%	35%	0%
	Self-reported teacher absenteeism (days)	24.2	22.7	20.1	11.6	<b>19.7</b>	23%	15%	2%	-41%	0%
	Repeated at least 2 grades	10.9%	9.3%	10.3%	1.8%	<b>8.1%</b>	34%	15%	27%	-78%	0%
	Pupil-Teacher-Ratio	36.3	34.8	35.5	30.5	<b>34.3</b>	6%	1%	3%	-11%	0%
	School in urban area	5.5%	21.4%	31.2%	73.3%	<b>31.9%</b>	-83%	-33%	-2%	130%	0%
	Student very old (14y+)	23.7%	20.1%	14.0%	2.0%	<b>15.3%</b>	55%	31%	-9%	-87%	0%
Home background	Speaks English at home 'Always'	5.6%	7.4%	9.2%	39.5%	<b>15.3%</b>	-64%	-52%	-40%	158%	0%
	Student has used a PC before	11.8%	39.9%	51.4%	94.9%	<b>47.8%</b>	-75%	-16%	7%	99%	0%
	More than 10 books at home	17.3%	23.0%	30.8%	67.2%	<b>34.1%</b>	-49%	-33%	-10%	97%	0%
	At least one parent has matric	29.9%	40.6%	49.3%	77.2%	<b>48.5%</b>	-38%	-16%	2%	59%	0%
	At least one parent has a degree	4.7%	7.8%	10.7%	28.7%	<b>12.8%</b>	-63%	-39%	-16%	125%	0%

Source: Own calculations based on SACMEQ III (2007) data.

<sup>4</sup> By this definition, a functionally illiterate learner cannot read a short and simple text and extract meaning, while a functionally innumerate learner cannot translate graphical information into fractions or interpret everyday units of measurement. See Shabalala (2005, p. 222) and Spaull (2011, p. 33) for further information.

