

**AN OVERVIEW OF PRODUCTIVE VOCABULARY LEVELS AMONGST ESL
LEARNERS AND TEACHERS IN GAUTENG TOWNSHIP SCHOOLS**

By

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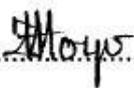
ABSTRACT

The study measures the productive vocabulary size of Grade 6 English Second Language learners and teachers in 16 township schools in Gauteng Province. Data from learners (n=881) and teachers (n=19) were collected by testing the participants with versions C and A respectively of the Productive Vocabulary levels Test of Controlled ability. In addition, samples of learners' written work were examined. Interviews and lesson observations with a sample of teachers were conducted to triangulate the data. Using SPSS version 23, means for each word level were calculated. The ANOVA, *t-tests* and *post hoc* tests were performed. Bonferroni corrections were applied. Results indicate that both learners and teachers have not mastered the vocabulary at the levels tested. The results also indicate that poor vocabulary teaching methods and poverty contribute to poor vocabulary development among learners.

Key terms: Productive vocabulary, Productive Vocabulary Levels Test, frequency levels, word families, vocabulary development, English Second Language, disadvantaged background, reading comprehension, academic achievement, speaking proficiency,

DECLARATION

I declare that AN OVERVIEW OF PRODUCTIVE VOCABULARY LEVELS AMONGST ESL LEARNERS AND TEACHERS IN GAUTENG TOWNSHIP SCHOOLS is my own work and that all the sources that I have used or quoted have been acknowledged by means of complete references

Signature:.....

Date: February 2018

Flora Moyo

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LIST OF ABBREVIATIONS

ESL	English Second Language
FAL	First Additional Language
AL	Additional Language
UWL	University Word List
PVLT	Productive Vocabulary Levels Test
CPVLT	Controlled Productive Vocabulary Levels Test
VLT	Vocabulary Levels Test
LoLT	Language of Learning and Teaching

CHAPTER 1

INTRODUCTION

‘Without grammar very little is understood; without vocabulary nothing is understood’

(Wilkins 1976: 111)

1.0 Introduction

This chapter will provide an outline of the background to this study, the research context as well as the statement of the problem. Furthermore, the study presents the aims, the hypotheses that guide it and the research questions that attempt to prove or refute the hypotheses. I will also describe the research design, limitations and the organisation of the study. The chapter ends with a brief conclusion.

One of the most crucial aspects that determine a person’s proficiency in a language and in reading comprehension is vocabulary knowledge and size. Wilkins (1976) compared the roles played by vocabulary and grammar in a language and reached the conclusion that while both aspects are important in communication, the role of vocabulary transcends that of grammar. Research (Staehr 2008; de Jong 2012; Al-Dersi 2013) reveals that vocabulary plays a fundamental role in the successful execution of the four language skills, namely listening, speaking, reading and writing - skills that children and adults alike need to conduct meaningful communication and also to succeed academically. Both First Language (L1) and Second Language (L2) learners need vocabulary knowledge to be competent in all four language skills which together are a prerequisite for all communication, be it oral or written (Staehr 2007; Staehr 2008; de Jong 2012; Koizumi & In’nami 2013).

1.1 Background to the study

This section attempts to show the important role of vocabulary in all learning as evidenced by research in South Africa and abroad.

1.1.1 Vocabulary and Reading levels

Reading is a construct that enables readers to extract meaning from written texts; hence learners should read extensively for enjoyment or intensively when they read to learn (Day & Bamford, 1999; Pretorius, 2000). Day and Bamford (1999) describe the Bottom-up and Top-down models which complement each other to facilitate successful reading. Efficient bottom-

up skills result in fluent decoding and efficient top-down skills result in meaning construction (Day & Bamford, 1999; Pretorius & Lephala, 2011). Vocabulary knowledge together with other components identified by the National Reading Panel (2000), which include phonemic awareness, phonics, fluency and comprehension result in successful reading. It is through successful reading that academic success is achieved. For successful reading to take place, learners need to understand most of the words that make up a text (Nation 2001). Nation (2001) suggests that for optimum comprehension to take place, readers must understand between 95% and 98% of all words in a text. These percentages seem to imply a strong correlation between vocabulary knowledge and successful comprehension, a notion that is supported by a considerable number of studies (National Reading Panel, 2000; Beck, McKeown & Kucan, 2002). Staehr (2008:140), reports that empirical studies of the relationship between receptive vocabulary tests and reading comprehension tests show a strong correlation ranging from 0.50 to 0.85, which means that learners with a larger vocabulary size read and comprehend texts better than learners with a small vocabulary. (Chapter 2 describes the relationship between reading and vocabulary in more detail).

Pretorius and Lephala (2011), who conducted a reading comprehension study in South African high-poverty schools, reveal that Grade 6 learners in these schools generally have very low reading levels. Their findings also reveal that most learners in high-poverty township schools are not competent in reading in their mother tongue (in this case Northern Sotho). Learners who are able to read in their L1 are generally able to transfer their L1 literacy skills to L2 literacy development (Roberts 2008, Cohen & Johnson, 2010). Pretorius and Lephala's (2011) study confirms that poor reading skills in the L2 seem to be a result of poor L1 literacy skills. In general there are high levels of poverty in most South African townships – a factor which aggravates poor reading levels (SACMEQ I, 1998; SACMEQ II, 2005; SACMEQ III, 2010; Beck et al., 2013). Poor reading development has implications for vocabulary development.

Furthermore, the Progress in International Reading Literacy Study PIRLS (2006) reports that South African grade 4 learners came last out of 40 countries that participated in the study (PIRLS, 2006; Pretorius & Lephala, 2012). The PIRLS tests learners in various comprehension levels, namely literal level questions in which learners are asked to retrieve explicitly stated information from texts, questions which require learners to make straightforward inferences from information given in a text, questions in which they have to

integrate ideas and information across texts and those which require them to examine and evaluate the text (Pretorius & Lephala, 2011: 2). Only 12% of South African Grade 4s were able to score in the literal level questions, (a result which seems to imply that even at the most basic level of comprehension, the tested South African learners showed minimum comprehension of texts (Pretorius & Lephala, 2011). The PIRLS findings seem to support the claim that reading is a crisis in South Africa (Pretorius, 2000; Klapwijk & Van der Walt, 2008; Pretorius & Lephala, 2011; Department of Education [DoE], 2012; Draper & Spaul, 2015; Rule & Land, 2017; Spaul, Pretorius & Mohohlwane, 2018).

The National Reading Panel (2000) state that, vocabulary is not only essential for comprehending texts, but it is also a necessary component in learning to read. The implication is that learners need to possess word identification (recognition) skills and also have knowledge of the identified words so that they are able to comprehend what they read. Lack of word recognition skills and vocabulary knowledge leads to reading comprehension failure (National Reading Panel, 2000; Biemiller, 2005). In terms of the early (pre-school) development of vocabulary, research shows that before learners read words from print, they should have learned the words through story book reading at an early age so as to have a rich background vocabulary knowledge (Robert, 2008; Johnson & Cohen 2010). This implies having access to literature and literacy events before learners start school. However, in most South African townships learners often grow up in a print-poor environment with little to no opportunities for vocabulary development because of poor socio-economic status. Nel & Muller (2010: 636) state that;

‘factors that contribute to poor L2 acquisition and academic achievement in township schools and rural areas are lack of access to newspapers, magazines, television, and radio, lack of English reading material, at home and at school, and poor language teaching by teachers whose own language proficiency is limited’.

In addition, the Department of Education (2012) policy on Language of Learning and Teaching (LoLT), prescribes that the L1 must be the language of instruction in grades 1 and 2. English (the most frequently used Additional Language) (AL) is gradually introduced orally in grade 3. In grade 4 English becomes the language of instruction (Department of Education, 2012). The gradual introduction of English in grade 3 is rather late and the transition to the use of English as LOLT in grade 4 is rather overwhelming for the learners as they face reading difficulties (Pretorius, 2000; Fleisch, 2008). Pretorius (2000: 91) states that

‘at Grade 4, most of the learners have barely mastered reading comprehension skills in their mother tongue, let alone the L2’. The implication is that such learners, who already enter school with a vocabulary deficit in their L1, will struggle even more with the switch to the AL as LoLT by grade 4 because most have not even mastered decoding in their L1 (Pretorius, 2000).

Like in reading, vocabulary is essential in successful listening, speaking and writing (Bonk, 2000; De Jong et al., 2012; Koizumi & In’nami, 2013). Staehr (2008: 140) in a study conducted with 88 Danish grade 9 learners of English, ‘found a high correlation of 0.83 between Vocabulary Levels Tests (VLT) and reading comprehension, a modest correlation of 0.69 between VLT and listening comprehension and a relatively strong correlation of 0.73 between VLT and writing’. Similarly, Staehr (2007) reported a Spearman’s correlation of 0.70 between VLT and listening comprehension. Findings from the mentioned studies indicate that vocabulary knowledge (especially at the 2000 word level) is an important learning goal for AL learners (Bonk, 2000; Staehr, 2008; De Jong et al., 2012).

Pretorius and Lephalala (2011) contend that learners who read at frustration level have to expend a lot of energy in decoding and also in interpreting word meanings so as to comprehend what they read. If learners have bigger (receptive and productive) vocabulary size, less energy would be required for successful reading (Pretorius & Lephalala, 2011). This study seeks to measure the productive vocabulary size of Grade 6 learners and teachers in township schools.

The next section describes general academic performance in national examinations as depicted by the National Assessments results for the learners and how vocabulary knowledge relates to the assessments.

1.1.2 National Assessments; Systemic Evaluations and the Annual National Assessments

The national assessments administered in South African public and some independent schools namely, the Systemic Evaluations (SE) and the Annual National Assessments (ANA) show poor levels of performance by all learners tested (Department of Education, 2005; Department of Education, 2014). The Department of Education, (2005) reports that in the last Grade 6 Intermediate Phase Systemic Evaluations (IPSE), 63% of the learners who took the tests scored at the ‘Not achieved level’ in the Language of Learning and Teaching Tasks. Furthermore, an analysis of learner performance in different question types in the English

tests, indicates that learners scored better in multiple choice questions (MCQs) (with an average of 49%) than in open-ended questions (31%) (DBE, 2005). The same trend is observed in content subject scores which leads Klapwijk (2012) to conclude that comprehension and formulating own answers were the major obstacles among learners. Similarly, the Annual National Assessments (ANA) which were suspended in 2015 following extensive criticism from the South African Democratic Teachers' Union (SADTU), showed results similar to the SE with the Grade 6 national average for First Additional Language (FAL) in 2014 recording a score of 45% (Department of Basic Education, 2014).

Additionally, the call for the institution of the Policy of Multilingualism in institutions of higher learning (e.g. universities), which advocates for the use of indigenous languages in learning under the guise of 'language rights' seems to be a case which points to the inability to use and comprehend English in learning situations. From the poor performance that is recorded in all subjects in all grades, it would seem that comprehension and formulation of own answers (concepts which require adequate vocabulary knowledge) are a large part of the problem in South African schools. Since poor results in schools inevitably lead to a focus on the quality of teaching, this study also focused on teachers' vocabulary levels.

1.1.3 Teachers and vocabulary instruction

While learners are the main focus of this study, it is deemed essential also to discuss the nature of teachers in terms of their professional development since they largely determine the nature and quality of learners who are produced by South African schools. Research indicates that most teachers in South African schools are not well trained to teach, especially in terms of teaching English (Pretorius & Machet, 2004; Nel & Muller, 2010; Jordaan, 2012; Mudzielwana 2012). The lack of trained teachers seems to be a major contributing factor to literacy levels particularly in low socioeconomic (SES) areas such as township schools (Pretorius & Lephalala, 2011; Mudzielwana, 2012). The then minister of National Planning Trevor Manuel in his diagnostic overview in Policybrief (2012) expresses that the quality of schools in townships is substandard. While it seems that the substandard quality of schools is determined by lack of material resources and libraries, the quality of teachers is also a cause for concern. Pretorius and Machet (2004: 58) state that 'teachers of literacy are themselves unskilled and do not read due to a strong oral culture and lack of reading material' The combination of a lack of resources and untrained or poorly-trained teachers has resulted in falling standards of South African basic education (Policybrief; 2012). Mudzielwana (2012:

25) also confirms that lack of reading material and books in schools and at home (especially in rural and township school) is a problem to contend with, and yet the Department of Education expects teachers to successfully teach reading.

In 2012 the Department of Education conducted a reading competency survey (RCS) among Grade 3 learners and findings reveal that only 38% of grade 3 learners in the country could read. The DoE (2012) attributed the low reading levels countrywide to a lack of well trained teachers in South Africa (PIRLS, 2006; Department of Education, 2007; Department of Education, 2011). The Department of Education (2008) also acknowledges the fact that poor reading amongst grade 3 learners is due to the poor training of the teachers manning the foundation Phase and states that:

‘Many teachers in South Africa have an under-developed understanding of teaching literacy, reading and writing. Many teachers simply do not know how to teach reading’. (DoE 2008: 10).

According to Mudzielwana (2012:22) the Outcomes Based Education (OBE) curriculum which was introduced abruptly in 1997, did not equip teachers with methods and strategies of teaching reading. Workshops that were meant to develop teachers left teachers overwhelmed as they grappled with multifarious facets of the new curriculum. Both the OBE and Curriculum Assessment Policy Statement (CAPS) (the latter was introduced in 2013, largely in an attempt to address the shortcomings of the OBE curriculum) seem to lack specific guidelines for *how* to implement the policies and teaching methods contained in the curricula (Department of Basic Education, 2012). In the CAPS document vocabulary instruction, which is one of the major components in teaching children to read, is superficially discussed and teachers are not given guidelines about how and what to teach in terms of word levels.

The National Reading Panel (2000) reports that most learners with reading problems have poor vocabulary levels and suggests that teachers should use various methods to teach vocabulary so as to help learners acquire the vocabulary that will help them to read. A few decades ago, vocabulary was pronounced as ‘a neglected aspect’ by Meara (1980). Recent research in various ESL classrooms reveals that vocabulary is indeed still being neglected by many teachers because teachers still spend very little time on explicit vocabulary instruction (Folse, 2010; Clouston, 2013). Some teachers who attempt to teach vocabulary are using poor teaching methods (Watts, 1995; Folse, 2010; Nel & Muller, 2010; Mudzielwana, 2012;

Clouston, 2013). Watts (1995) investigated how teachers teach vocabulary during reading lessons and findings reveal that teachers have different teaching behaviours when it comes to explicit vocabulary instruction. According to Watts (1995: 400) some teachers spent less than 3% of their instructional time on vocabulary teaching while others spend 11% of their time of teaching word meanings. The situation in South Africa seems no different. Vocabulary teaching is still being neglected and where it is practised, it is superficially done (Mudzielwana 2012). Mudzielwana, (2012: 22) concludes that teachers need practical help so that they do not pay lip service to vocabulary teaching.

This study therefore sets out to investigate the (productive) vocabulary levels of (Grade 6) learners and teachers.

1.2 The research context

The study was conducted in a high-poverty township area in the Gauteng province. Data were collected from 881 Grade 6 learners and 19 teachers from 16 primary schools in the township. Of the 16 schools, five are independent schools and 11 are public schools.

Of the five independent schools used in the study, two are strictly English medium, from grade 1-7. However one of the two schools enforces the use of English in and outside the classroom to develop learners' basic interpersonal communication skills (BICS) (Cummins, 2000). At the public schools, the learners' L1 (Zulu or Sotho) is used as LoLT from grade 1 to grade 3. From grade 4, English is used as the LoLT while the learners' L1s are taught as a subject.

Although 90% of the teachers in the public schools are trained teachers, they are not always proficient in the English language (Mudzielwana, 2014:19) and are also not always adequately trained to teach English as reported by Naledi Pandor, the then minister of education (Jordaan, 2012). In terms of resources, public schools receive text books and Department of Basic Education (DBE) workbooks from the government for each learning area (Mudzielwana, 2012). Schools used in the study have no libraries. There is one community library available in the township. However it seems that primary school learners tend not to utilize this facility (Nel & Muller, 2012).

1.3 Statement of the problem

Research reveals that vocabulary size (and not depth) is a good predictor of reading comprehension (Anderson & Freebody, 1981; Koda, 1989; Astika, 1993; Coady et al., 1993; Nation, 2001; Stahl & Nagy, 2006; Willingham & Price, 2009; Kameli et al., 2013). Moreover, if learners cannot read, they cannot acquire vocabulary that occurs in print which is necessary for comprehension and academic success. The majority of South African learners come from low socio-economic environments that are all but devoid of books and exposure to early literacy events (such as storybook reading) which are known to develop children's pre-school literacy skills (including vocabulary) (Pretorius, 2000; Roberts, 2008; Cohen & Johnson, 2011; Pretorius & Lephala, 2011). As such, Pretorius and Stoffelsma (2017:2) clearly point out that vocabulary development correlates strongly with socioeconomic status. Most learners in South Africa come from disadvantaged townships (low socioeconomic backgrounds) and start school with knowledge of very few English words because they come from homes where they are not exposed to rich oral and written input. They also state that children learn their first L1 and their L2 words from social interaction. Most parents of low socioeconomic status in South Africa are not literate enough to use English as a language of social interaction and storybook reading is not practised.

In addition, most pre-schools are play centres rather than places for early learning hence learners start formal school with very little FAL vocabulary (Pretorius & Lephala 2011). Moreover, many pre-school teachers are not trained and therefore have no knowledge or the capacity to read storybooks to their preschool learners (Roberts 2000; Cohen & Johnson 2010). The mentioned factors result in learners entering Grade 1 with very small English vocabulary knowledge -less than 800 words (Pretorius & Stoffelsma 2017: 3).

The lack of effective (vocabulary) teaching methods in schools is a major problem in FAL vocabulary acquisition (Roberts, 2008; Nel & Muller, 2010; Mudzielwana, 2012). Research (Beck, McKeown & Kucan, 2002) reveals that when children enter their first grade, they start off with the receptive vocabulary which they acquired from listening and interacting with adults and from exposure to printed material. Both the FAL vocabulary gained from print and oral interactions are transformed into written vocabulary at school, a process that should be facilitated by the teacher, (Watts 1995). However, in the South African context, most learners enter school without much English vocabulary, and it seems most teachers are not adequately trained to facilitate the process of vocabulary development (Nel & Muller, 2010; Pretorius &

Lephalala, 2011; Pretorius & Currin, 2012; Department of Education, 2012; Mudzielwana, 2012; Jordaan, 2014). A study by Nell (2011) about what Foundation Phase teachers knew about comprehension and how well they are trained to assess it revealed that teacher trainees had limited knowledge about how to teach and assess reading comprehension. The same findings were obtained by Mudzielwana (2012). Pretorius and Klapwijk (2017: 6) mention that the existing vocabulary instruction in schools is one in which comprehension is mainly oral with little written work. Quality discussion in the classroom which can lead to learners learning new words is minimal (ibid). In the words of Pretorius and Klapwijk (2017:6) ‘producing knowledgeable teachers is the biggest challenge in South Africa’.

Mudzielwana (2012: 24) contends that teachers generally are unable to create opportunities of teaching vocabulary in their classes. This implies that they need to use a combination of teaching methods as well as vocabulary teaching strategies to facilitate word learning. Direct and indirect vocabulary teaching methods should be employed. Above all, teachers need to know that the most crucial vocabulary to be taught is the 2000 word level (Nation, 2001; Beck et al., 2002; Laufer & Nation, 2005). Additionally, curricula are not always specific enough about vocabulary development, which means teachers do not focus sufficiently on vocabulary teaching and lack effective vocabulary instructional methods as well as vocabulary and reading comprehension strategies to help learners develop much needed vocabulary, (Klapwijk & Van der Walt, 2008; Mudzielwana, 2012).

The next section discusses the aims of the study.

1.4 Aims of the study

This study had the following aims:

- to measure the productive vocabulary size of Grade 6 learners in township schools using a Productive Vocabulary Levels Test
- to measure the productive vocabulary size of teachers in township schools using a Productive Vocabulary Levels Test
- to investigate existing methods and strategies used by teachers in teaching vocabulary
- to determine the types and levels of words that Grade 6 learners use in their writing.

The above aims were achieved as follows:

The first aim was to establish the productive vocabulary size of Grade 6 learners at the different word levels of the Controlled Productive Vocabulary Levels Test (CPVLT) created by Laufer & Nation (1999). Grade 6 learners were chosen for this study because Grade 6 is the highest grade in the Intermediate Phase and the exit grade into the Senior Phase. The learners were administered with Version C of the CPVLT and answered questions on five levels, namely the 2000, 3000, 5000, the University Word List (UWL) and the 10000 word levels (see chapter 3 for the nature of the questions).

The second aim was to determine teachers' knowledge of the different word levels as described above. Teachers were however, administered Version A of the CPVLT.

The third aim was to investigate methods that teachers currently use for teaching vocabulary in their classrooms. To achieve this aim, I conducted classroom observations while teachers taught reading comprehension lessons or content subject lessons and observed how they teach vocabulary. I also examined learners' exercise books to find out the nature of vocabulary exercises they administer to learners.

The fourth aim of the study was to determine the types of words that Grade 6 learners use in their own writing. This was achieved by examining texts that learners wrote in class, such as compositions and self-constructed sentences. Extracts of the learners' texts were analysed with an online Vocabprofiler to determine the frequency levels of the words learners use in their own writing.

The next section discusses the hypotheses and the research questions that drive this study.

1.5 Hypotheses and research questions

Four research questions were formulated for this study. Research Questions 1 and 2 are deemed to be the main research questions (as per the title of this study). The four questions, with accompanying hypotheses for Research Questions 1 and 2, are as follows:

Research Question 1

What is the productive vocabulary size of the Grade 6 township school learners as measured by the Productive Vocabulary Level Test?

Research Question 1 can be formulated into the following hypothesis: the majority of learners in the participating schools have a small productive vocabulary that is below the level required for academic success at their grade level.

Research Question 2

What is the productive vocabulary size of the teachers in township schools as measured by the Productive Vocabulary Level Test?

Research Question 2 can be formulated into the following hypothesis: most teachers in the participating schools have a small productive vocabulary.

Research Question 3

What kind of vocabulary instruction takes place in the participating Grade 6 township schools?

Research Question 4

What percentage of words at the different VLT levels do learners use in their writing?

Research question 1 serves to verify or refute hypothesis 1; research question 4 helps to strengthen research question 1 through examining learners' writing and establishing the percentage of words at different levels (2000, 3000, 5000, UWL) that they use in their writing and comparing the findings with the results of the PVLTL.

Research questions 2 and 3 attempt to address the second hypothesis by measuring teachers' vocabulary levels and investigating, through classroom observations and interviews, what methods they use to teach vocabulary.

1.6 Research design

The study used a non- experimental descriptive design to investigate the vocabulary levels of ESL learners and teachers in Johannesburg South District township schools. A mixed-method approach was used by gathering both qualitative and quantitative data. The instruments used in data collection included PVLTL Version A for teachers and Version C for learners, lesson observations, interviews and learners' FAL exercise books. Both descriptive and inferential

statistics were used to analyse the results with inferential statistics used to draw conclusions (Donyei, 2007). Details of the research design are provided in chapter 3 of this study.

1.7 Limitations of the study

The area under study is a low SES township area in the Gauteng Province which has a very large population. Due to time limits – research activities are only allowed during the second and third term of the school year, and even then, researchers often have to negotiate time in the busy school day - and travel constraints it was possible to reach 16 out of the 33 primary schools in the district. However, despite using only 16 schools, a satisfactory number of learners were tested – in all the vocabulary levels, 881 learners were tested. Sufficient data in the form of samples of learners’ written work was selected from their daily classwork exercise books. It was difficult to obtain a sufficient sample of written work, because schools were reluctant to let me remove learners’ workbooks from the school property. In addition, at the end of the year, when schools are not as concerned about books being removed, many learners had already taken their books home and did not return to school after the end of the exams. However, since these data were considered supplementary to the main aims (PVL results), they were considered adequate for the purposes of this study.

1.8 Organisation of the study

Chapter 1 of the study has presented the introduction, background of the study, the research context, research problem, the purpose and aims of the study, the hypothesis and research questions, the significance of the study and the limitations. Chapter 2 will review literature that is related to this study. Chapter 3 will discuss the methodology in this study, whilst Chapter 4 will present and discuss the findings of the study. Finally, Chapter 5 will revisit the research questions and summarise the main findings before making recommendations for further research.

1.9 Conclusion

In conclusion, this chapter discussed the background to the study, the research context, statement of the problem, aims of the study, the hypothesis and the research questions, the research design, limitations and finally the organization of the study. The next chapter is a review of literature on issues related to vocabulary size.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter reviews literature on issues related to the vocabulary size and development of English Second Language (ESL) learners. Although a number of studies have documented the productive vocabulary size of university ESL students in South Africa (e.g. Pretorius, 2000; Scheepers, 2003; Nizonkiza, 2016) and some research exists on the vocabulary size of primary school learners (Pretorius 2002; Pretorius & Lephalala, 2011; Scheepers, 2014), still more research needs to be done about the productive vocabulary size of Grade 6 learners in particular and teachers in township schools in South Africa. Grade 6 learners were selected for this study because they are the class writing the Annual National Assessments in independent schools and also mark the end of Intermediate Phase.

The aim of this literature review is to find out what has been done regarding productive vocabulary knowledge among ESL learners and then situate the present study within the larger context of existing research so as to determine where the gap is, if any. To achieve the stated objectives, the following will be done; types of vocabulary knowledge will be discussed, the term vocabulary will be defined, the concept of what counts as a word will be discussed, and theories that influence vocabulary learning will be presented. Thereafter, the relationship between vocabulary breadth and depth will be discussed. A distinction between receptive and productive vocabulary and factors that influence variations of vocabulary size amongst learners will be addressed. The relationship between receptive and productive vocabulary as well as the productive vocabulary threshold will be presented. I will also discuss what is involved in knowing a word, what productive vocabulary knowledge entails, the relationship between productive vocabulary and reading, writing and speaking. The review will also discuss the importance of knowing a word productively, how much vocabulary should be taught to ESL learners, the Curriculum Assessment Policy Statement (CAPS) as it relates to vocabulary development, and finally teachers and vocabulary teaching and how CAPS is implemented by ESL teachers in schools.

2.1 Types of vocabulary knowledge

In the reviewed literature, vocabulary is grouped into various categories depending on common characteristics of each group. I will first discuss the receptive and productive vocabulary categories. Receptive vocabulary refers to words that are recognized and understood when seen in print or heard, while productive vocabulary refers to the words that are understood and used in speaking and in writing (Nizonkiza & Van den Berg, 2014). Laufer (1998) further categorizes productive vocabulary knowledge into two types namely, controlled productive and free productive knowledge. In free productive vocabulary learners use words in free production such as when writing compositions or when speaking whereas in controlled productive vocabulary, a learner uses a word in a sentence only when prompted to do so by a teacher or a researcher (Laufer and Nation 1999; Schmitt et al. 2001; Caspi & Lowie, 2013). However, Caspi and Lowie (2013:438) conclude that ‘not all learners who use infrequent vocabulary when forced to do so will also use it when left to their own selection of words’.

Al-Dersi (2013) puts words into oral and written categories. Students must be able to know and understand words in print when they read and write as well as when they speak and listen during oral communication (Al-Dersi (2013: 44). The mentioned categories are equated with receptive and productive vocabulary respectively as illustrated in Figure 2 and will be discussed in detail in the next section of this chapter.

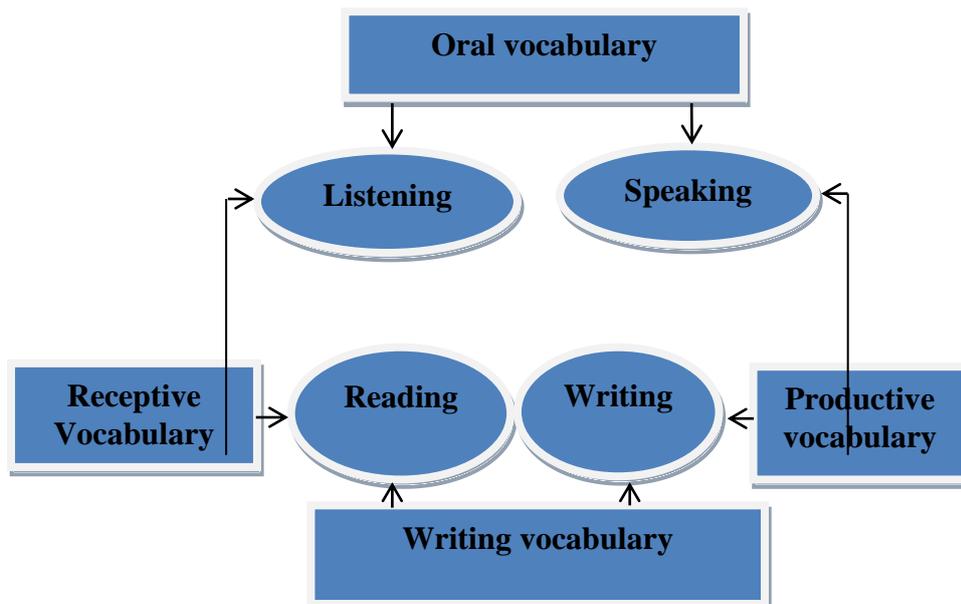


Figure 2.1: Types of vocabulary knowledge (adapted from Al-Dersi (2013: 44))

Receptive vocabulary is largely superficial word knowledge and learners cannot use this knowledge to comprehend texts and express themselves adequately. However, after the acquisition of controlled productive vocabulary knowledge learners may know a word by using it without being prompted provided their experience with the word increases. Their word knowledge depth can only be enhanced by providing learners with ‘quality learning’ of the word (Laufer 1990: 5) and by encountering the word in several contexts (Laufer & Nation, 1995; Yamamoto 2011).

Laufer and Nation (1995) designed a Lexical Frequency Profile (LFP) which became the basis to measure learners’ vocabulary knowledge. The lexical frequency profile groups words in the English language into levels according to their frequency of use. Each level comprises 1000 words, except the academic vocabulary list level, also called the University Word List (UWL), which has 570 words. The most frequently occurring content words and function words are in the first 1000 word level, followed by content words in the 2000, 3000, 5000 and 10000 word levels. The words become less frequently used and more unfamiliar as the levels increase. The Vocabulary Levels Test (VLT) and the Productive Vocabulary Levels Test (PVLT) which are used to test receptive and productive vocabulary sizes respectively comprise the 2000, 3000, 5000, UWL and the 10000 word levels (Laufer & Nation, 1995; Schmitt, Schmitt & Clapham, 2001). Productive and receptive vocabulary knowledge will be discussed in more detail in section 2.6.

In the reviewed literature, narrower categories of vocabulary that exist in the language are also discussed. Blachowics and Fisher (2006) list three categories namely, generalized, specialized and technical vocabularies. The categories are also referred to as Tier One words, Tier Two words and Tier Three words respectively by Carmille et al. (2006). The named categories overlap with Laufer and Nation’s (1995) frequency levels discussed in the previous paragraph. Oxford and Scarcella (1994), in agreement with Nation (2001), indicate in their findings that in conversations, generalized vocabulary, also called Tier One words, occur at very high frequency and appear in context. The Tier One words comprise of function words and high frequency content words (e.g. *book, girl, sad, run, dig*) (1000 level words in Laufer & Nation’s 1995 Lexical Frequency Profile) (LFP). Children learn these words with ease hence very little or no instruction is required for them to master the words (Carmille et al. 2006, Mehrpour et al. 2011).

Tier Two words correspond with the 2000 word level and most of them appear in print. Beck et al. (2002: 221) describe the 2000 word level as words of high frequency, high utility and conceptual words (e.g. *fortunate, masterpiece, industrious*). If teachers focus instruction on these words their efforts would be fruitful since the 2000 word level is crucial for basic communication and makes up the bulk of running words of any text. Tier Three words also appear in print however, they are not commonly used in informal or everyday conversation. According to Beck et al. (2002: 221), the words are low frequency words, and are specially connected to a particular domain and most of them correspond with Laufer & Nations's (1995) 3000 word level (e.g. *economics, isotope, Revolutionary*). In addition, Archer and Hughes (2011: 23) contend that Tier three words are domain specific and children start to encounter these words when they start reading at school. These words are the academic words which in the PVLTL also include the University word list (UWL). The words require explicit instruction and teachers should use tasks that will help children enhance the learning of the words. Beck et al. (2002) argue that these words are best learned when specific needs arise.

The reviewed literature seems to show that vocabulary is organized into categories which perform different functions in the language and are at different levels of frequency and difficulty, namely the 2000, 3000, 5000, UWL and the 10000 word levels. The level of difficulty increases from the 2000 word level to the 10000 word level respectively. Although in some cases researchers agree and/or disagree on categories, it is important that both teachers and learners are aware of and understand these categories so that during instruction they focus more attention on the words that are crucial to the understanding of texts, and concepts for their specific levels. Knowledge of learners' productive vocabulary is thus important as it will help in the planning of interventions that could increase vocabulary breadth and depth (see § 2.5.1 & 2.5.2 for discussion of these concepts). To conclude this section, Schmitt, Schmitt and Clapham (2001: 55) state that 'vocabulary is an essential building block of a language as such it makes sense to be able to measure learners' knowledge of it'.

The next section defines the term *vocabulary*.

2.2 Defining Vocabulary

Many definitions exist for the term *vocabulary*. Generally, many people regard vocabulary as referring to big words that learners have to look up in dictionaries to understand their meanings. However, that is not always the case as will be seen from the various definitions of the term. According to Ur (2011:75), vocabulary is defined as ‘words in a language’ which implies that vocabulary refers to both single lexical items and idioms or a group of words that express a single concept in a language. From this definition, it is clear that what is called a word is not necessarily a single lexical item per se since an idiomatic expression made up from several words can also represent a word. For example an idiom, such as *look down upon* represents a single word, *despise*. Nash and Snowling (2006: 33) define vocabulary as ‘knowledge of words and their meanings’. The element of meaning adds another dimension to words in a language. This definition implies that if one has seen or heard a word but does not know what the word means, it means that the word cannot be claimed as part of that persons’ vocabulary (Beck et al., 2013). Al-Dersi (2013:73) on the other hand states that vocabulary ‘refers to students’ understanding of both oral and print words’. In this definition, oral words are the words that are recognized from listening and speaking while print words are words that people recognise in reading and writing (Al-Dersi, 2013: 73) See Figure 2. Pignot-Shahov (2012: 37) discusses the concepts of receptive and productive vocabulary and states that listening and reading are associated with receptive vocabulary while speaking and writing are associated with productive vocabulary. A more detailed discussion on receptive and productive vocabulary knowledge will be provided in section 2.6 and 2.7.

Bintz (2011: 44) defines vocabulary ‘as consisting of *all* the words known and understood by a person so as to communicate effectively’. The words must enable that person to understand concepts and also to communicate effectively in both social and academic contexts. Therefore, function and content words alike are all vocabulary (Nation, 2001; Bintz, 2011). All words are important since together they help to express meaning.

The definitions given by various researchers in the preceding paragraphs all share commonalities which in summary are that vocabulary refers to all the words known and understood by an individual and used for effective communication in both oral and written texts. Knowing the meaning of a word entails not just the superficial knowledge of the word but also its subtle meanings as well as its different shades of meaning. As Nation (2010: 47) puts it ‘knowing a word means being able to recognize the spoken and written form of the

word as well as its meaning'. The written form of the word refers to its spelling while the spoken form is the way the word is pronounced. Therefore, all the words a person is able to use to communicate effectively comprise that person's vocabulary. In other words, knowledge of a language is knowledge of the meaning of the vocabulary of that language (Bintz, 2011). ESL learners need to acquire enough Additional Language vocabulary to enable them to function effectively in the Additional Language.

Productive vocabulary is the main focus of this study. Comprehension and academic success depends to a great extent on vocabulary size and productive vocabulary knowledge. This study seeks to measure the productive vocabulary size of Grade 6 township school learners and teachers from 16 schools in a district in the Gauteng Province in South Africa. I will use a Controlled Productive Vocabulary Levels Test (PVLVT) created by Laufer and Nation (1999) to measure their productive vocabulary size.

The next section discusses what counts as a *word*.

2.3 What counts as a *word*?

From the definitions discussed in the foregoing section, it is clear that vocabulary refers to words in a language. In this section, I will clarify what the concept of a *word* entails since it affects the concept of vocabulary size of an individual. Words in any text can be described in terms of four categories namely *tokens*, *types*, *lemmas* and *word families* (Moghadam et al. 2012: 555).

A *token* is defined as 'any instance or occurrence of a word' (Reynolds, 2011: 11) or simply the total number of words in a text. For example in the sentence: *This is the man who killed the man who lives near the river*, there are 13 tokens. In *type* every different form of a word is counted as a different word (Bauer & Nation 1993: 254). It means that all the words with the same spelling in a text are one type. The sentence above has nine (9) *types* namely *this*, *is*, *the*, *man*, *who*, *killed*, *lives*, *near*, *river*. *Lemmas* are all regularly inflected words sharing the same stem and belonging to the same category (Reynolds, 2011: 13). Moghadam et al. (2012: 556) describes a *lemma* as consisting of a headword and its most frequent inflections. However the process should not involve changing the part of speech from that of the headword. An example would be: [(**verbs**: *jump*, *jumps*, *jumped*, *jumping*) (**nouns**: *jumper*, *jumpers*) and (**nouns**: *jump*, *jumps*)] are three different categories and are therefore considered three (3) lemmas.

Finally, *word families* are regularly inflected and derived words sharing a stem (Reynolds 2011:18) for example; *jump, jumps, jumped, jumping, jumper, jumpers* are all considered part of one family.

In this study, I will consider word families to estimate the productive vocabulary size of learners and teachers. For inflections such as *kick, kicked, kicks, and kicking* the four words belong to one *family* and are counted as one word. *Kind, unkind, kindly* and *kindness* are also regarded as one word since they belong to one *family*. The words are formed by adding affixes to the stem *kind*. For example a suffix *-ed* is added in front of the verb *kick* to result in the past tense *kicked*. Similarly a prefix *un-* is added to the adjective *kind* to obtain the opposite of kind which is *unkind*. If a person knows one or all the four words in the word family, the person is regarded as having a vocabulary size of *one* word.

Derivatives are also counted as one word. Derivatives are formed by adding affixes to other words or morphemes. In addition, idioms such as *look down upon* are considered as one word since the group of words express a single concept which is *despise* (Ur, 2011).

2.4 How vocabulary is learned?

This section attempts to describe how vocabulary is learned. For English Second Language (ESL) learners, vocabulary cannot be learned in isolation from language learning. As one learns a language one also learns new words. Several theories explain how language and indeed vocabulary is learned. The process of learning can take place incidentally or informally outside the classroom or explicitly in the classroom situation.

Among the prominent theories of vocabulary learning is Vygotsky's (1978) Zone of Proximal Development (ZPD) theory. The Zone of Proximal Development (ZPD) is described as 'the distance between the actual developmental level of a learner as determined by independent problem solving ability and the learner's potential developmental level as determined by the ability to solve problems when assisted by an adult or through collaboration with capable peers (Willingham & Price, 2009: 93). The ZPD theory explains how the notional distance between what the learner knows and what the learner has the potential to know can be closed by scaffolding. Scaffolding describes an action carried out by teachers, peers and adults in assisting learners to attain their potential level as they interact with them (Willingham & Price, 2009; Nizonkiza & Van den Berg, 2014). Learning of new words takes place through social interaction and guidance from more capable peers or parents and teachers. The theory

further urges teachers in particular to prepare language learning activities that aid vocabulary development (Willingham & Price, 2009; Nizonkiza & Van den Berg, 2014). Thus the society at large has the responsibility to participate in learners' vocabulary development.

Schema theory is another theory that explains how vocabulary is learned. It states that children with limited schemas (i.e. word knowledge) have difficulty learning new words (Willingham & Price, 2009; Nizonkiza & Van den Berg, 2014). Schema refers to background knowledge, knowledge of the world which learners acquire when they are young through interaction with adults or through storybook reading (Pretorius, 2006; Roberts, 2008; Cohen & Johnson, 2010; Nizonkiza & Van den Berg, 2014). When learners encounter new words in their reading the existing knowledge acts as a scaffold for learning new vocabulary. Children with limited schema often also have limited reading ability and their chances of acquiring more vocabulary are reduced (Pretorius, 2006; Roberts, 2008; Cohen & Johnson, 2010; Nizonkiza & Van den Berg, 2014).

The Matthew Effect theory postulated by Stanovich (1986) is another theory that explains vocabulary growth or the lack thereof, in learners. The theory states that:

‘The very children who are reading well and who have good vocabularies, will read more, learn more word meanings and hence read even better. Children with inadequate vocabulary, who read slowly and without enjoyment, read less and as a result have slower development of vocabulary knowledge which inhibits further growth in reading ability’ (Stanovich 1986: 381).

The Matthew Effect theory clearly signifies that when children are able to read, they tend to read more because they understand and enjoy what they read. In the process, they acquire more vocabulary unlike poor readers who read less or not at all and thus end up losing even the vocabulary they have acquired. The theory supports the notion that extensive reading increases vocabulary size through incidental learning. The reverse of the theory is ‘the poor-get-poorer’ (Stanovich 1986: 38). The Matthew Effect theory is derived from the rich-get-richer notion after The Gospel according to St Matthew Chapter 25 verse 29 which states: ‘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’ (Stanovich 1986: 382). Thus learners need to be exposed to storybook reading early so as to develop background knowledge and so that they experience new words early in life which in turn will help them to access new

vocabulary in their later reading years (Pretorius, 2000; Roberts, 2008; Willingham & Price, 2009).

The pedagogical implication of the ZPD theory, Schema theory and the Matthew Effect theory is that teachers should enforce vocabulary development and should teach it explicitly. They should also engage in intensive reading activities with learners regularly so as to build a strong background knowledge on a wide range of topics so that learners acquire diverse vocabulary. In addition, for words to be learned, they must be familiar to children hence background knowledge is crucial in vocabulary development – this underscores the importance of storybook reading as some words encountered during early storybook reading are met later in school and elsewhere and therefore will enable children to learn them better.

In addition to the named theories, it should be noted that not all words are learned with the same ease. There is need to explain why some words are learned more easily than others. Research (Freebody & Anderson, 1983a; DeRidder, 2002; Willingham & Price 2009) reveal that learners tend to learn words that are useful for the understanding of concepts more easily than other words. Freebody & Anderson (1983a) refer to this tendency as ‘word saliency’. The pedagogical implication is that, when selecting words to teach, teachers should select words that are important for the understanding of concepts being taught. It is important to mention that while the three theories explain how vocabulary is learned, they complement each other in the development of vocabulary. Word saliency helps to explain why some words are more easily learned than others and why individuals have varying vocabulary sizes.

The next section will discuss vocabulary knowledge types.

2.5 Vocabulary knowledge types

It is important to discuss both vocabulary breadth (size) and vocabulary depth (deeper knowledge of a particular word) as the two are important in both language proficiency, reading and academic success (Nation, 2001; Hatami & Takavoli, 2012; Pignot-Shahov, 2012).

2.5.1 Vocabulary breadth

Anderson and Freebody (1981: 92) define vocabulary breadth as ‘the number of words for which a person knows at least some of the significant aspects of meaning’. According to

Koizumi and In'mani (2013) the kind of meaning referred to is the primary meaning of the word which might mean a translation in the learners' first language or the very basic meaning of the word. Vocabulary breadth also means knowledge of a word that involves at least the ability to recognize the form of the word and link it to meaning (Milton, 2009: 60). Shen (2008: 136) provides an even more simplified definition of vocabulary breadth as 'the number of words that a person knows'.

In the definitions given it is clear that in vocabulary breadth, the level of knowledge of words is not an issue. Research indicates that learners first acquire form-meaning knowledge of a large number of words before they can develop their deeper word knowledge (Qian, 2002; Pignot-Shahov, 2012; Koizumi & In'nami, 2013; Schmitt et al. 2001). Knowledge of a large number of words enables effective oral basic communication, also called Basic Interpersonal Communication Skills (BICS) (Cummins, 1980). Reading comprehension performance also depends partly on vocabulary breadth (Cummins 1980; Anderson & Freebody, 1983a; Pretorius 2000; Zhang & Annual, 2008). It is the size of an individual's vocabulary that is believed to predict partly that person's speaking as well as writing proficiency (Staehr, 2009; Schmitt 2010; Koizumi & In'mani, 2013). Learners who know more words (especially words at the 2000 word level) communicate better than learners who know fewer words (Schmitt 2000; Stahl & Nagy, 2006).

Before I discuss vocabulary depth, in the next paragraph, I will describe briefly the Vocabulary Levels Test (VLT) that is used to measure a person's receptive vocabulary breadth.

2.5.1.1 Vocabulary Levels Test (VLT)

Although the focus of this study is measuring the productive vocabulary level of ESL learners, it is important to discuss briefly the VLT designed by Nation (1990) since the PVLT that is used in the present study was adapted from the VLT. The VLT was originally developed by Nation (1990) as a diagnostic tool to provide estimates of learners' written receptive vocabulary knowledge (Kremmel & Schmitt, n.d.:1). It is used by researchers to estimate L2 language learners' vocabulary breadth (Schmitt & Meara, 1997; Read, 1998). The revised version by Schmitt (2001) appears in two parallel versions. The original VLT by (Nation 1990) estimated learners' vocabulary in five frequency levels namely the 2000, 3000, 5000, UWL and 10000 word levels. The revised version included items from the

Academic Word List AWL by Coxhead (2000). In each section of the VLT, there are 30 items. Each item consists of a cluster of six words in a column on the left hand-side that is matched with three definitions on the right-hand of the column. For example:

2000 word level

<u>Item 1</u>	<u>Words</u>	<u>Definitions</u>
	1 birth	
	2 dust	_____ game
	3 operation	_____ winning
	4 row	_____ being born
	5 sport	
	6 victory	

Adapted from Kremmel & Schmitt, p9. <http://www.norbertschmitt.co.uk>

The learner selects three words from the left-hand column to match the three definitions in the right-hand column. Each item represents 100 words in that word level. The test does not test knowledge of word meanings (Schmitt, 2010). Rather, it tests recognition of the form of the word and therefore cannot be used to test how well a word is known. In language learning, the form-meaning link is the basic knowledge that learners should acquire as receptive knowledge of a word.

In the VLT, the scores of different word levels stand separately, meaning that scores from the four levels are not added up to obtain a total vocabulary score (Kremmel & Schmitt, n.d.). Therefore, it means that each level can be administered on its own depending on the purpose of testing (Nation 1999).

2.5.1.2 Productive Vocabulary Levels Test of Controlled ability

Since the VLT tested the receptive knowledge of words, it was necessary to develop a test that would test productive vocabulary knowledge of ESL learners. Hence the Controlled Productive Vocabulary Levels Test (CPVLT) was designed. The Controlled Vocabulary Levels Test was designed by Laufer and Nation (1995) and was adapted from the VLT by Laufer & Nation (1990). It followed the VLT format of ranking words into levels based on frequency of occurrence (Laufer & Nation 1999: 35). The argument behind ranking words

into levels is that English language consists of a very large number of words and it would be impossible to teach all the words. In addition, it was observed that it would be easier to learn words in order of their frequency of occurrence (Laufer & Nation 1999: 35). Moreover, only words of high frequency such as words from the 2000 word level should be given individual attention. Laufer & Nation (1999:35) contend that teachers should not spend valuable class time teaching words from higher frequency levels i.e. words at the 3000 word level and above. Instead, Laufer and Nation (1999) recommend that teachers should teach vocabulary learning strategies so that learners can use the knowledge of the 2000 word level to find meanings of lower frequency words on their own.

Like the VLT, the CPVLT consists of the 2000, 3000, 5000, UWL and 10000 word levels. However, in my study learners did not answer the 10000 word level thus they were tested in the four levels. I also replaced the UWL level of Version C with the UWL level from the parallel Version B. The CPVLT is a test of controlled ability, hence the name Controlled Productive Vocabulary Levels Tests. From each word level a sample of 18 words represent 1000 words at each level. The questions consist of sentences in which the required words appear incomplete, with only a few letters to begin the words. The first few words are clues that guide learners to find the appropriate words. (Details about the test are discussed in chapter 3). The test taker completes the incomplete word in all the questions of the four levels for learners and five levels for teachers. An example of the completion item type is:

The garden was full of fra_____ flowers. (Answer: fragrant)

Version A uses items from the original VLT and it was published in 1995, while other versions, Versions B, C and D use different items but from the same word levels. The resultant versions that were produced by this process are called parallel versions. These three parallel versions A, B and C were devised by Norbert Schmitt in 1993, ten years after it was first published by Nation (1983). Two studies were conducted to produce these versions; one study checked the reliability and validity of one version and the other checked the equivalence of the four parallel versions of the test (Laufer & Nation, 1999: 38). Before the Tests were administered to the ESL learners, it was administered to a group of native speakers.

The study was further conducted to find the equivalence of the four parallel versions. Three more versions were made up using different items from the same levels. Again, four groups

of learners of different levels of proficiency were selected. Pearson correlations between the four tests were calculated for each of the four levels. Version C was found to have a reliability of .91 on the Kuder-Richardson K21 Formular and it discriminated learners of different proficiency levels (Laufer & Nation, 1999: 44). Thus currently researchers use any of the parallel versions to test productive vocabulary levels of ESL learners.

The next section discusses vocabulary depth.

2.5.2 Vocabulary depth

It is after the acquisition of the superficial meaning of a word that learners start to learn the deeper meaning of the word as they encounter it in different contexts (Milton, 2009). Vocabulary depth, unlike breadth, relates to the *quality* of word knowledge rather than size. Staehr (2009: 579) defines word depth knowledge in terms of ‘how well words are organized in a learner’s mental lexicon’. This definition signifies that words network or connect with other words already known in the learners’ mental lexicon. For example, a word may form networks when it connects with its synonyms, antonyms or collocates in the learners’ mental lexicon so that the more networks a word has the deeper the knowledge one has of the word (Milton, 2009). Koizumi and In’mani (2013: 34) define depth knowledge as ‘how well words are known’. The degree of word knowledge is determined by the different forms of word knowledge that a learner has acquired about the word. It is the number of forms of word knowledge that determines the quality of word knowledge one has of a word. Nation (2001: 27) provides a framework of knowing a word productively. The forms of knowledge include;

- Pronouncing it correctly
- Spelling it correctly
- Constructing it correctly using right word parts in their appropriate forms
- Producing it to express intended meaning in different contexts
- Producing its synonyms and antonyms
- Producing it with its collocates (Nation 2001: 27)

Researchers provide different forms of word knowledge. However they mention that it is difficult to test all the forms of word knowledge at once. According to Willingham and Price (2009) the different forms of knowledge include knowledge of the word’s morphology, phonology, syntax, the sociolinguistic aspects of the word, knowledge of the difference between the written and the spoken forms of the word as well as strategies that learners can use to approach the unknown word. Milton (2009: 61) also mentions different forms of word

knowledge such as the word's associational knowledge, collocation and inflectional knowledge.

Depth of word knowledge further includes forms of word knowledge such as partial and precise meaning, and knowledge of a word's prefixes and suffixes (Staeher, 2009; Hatami & Takavoli, 2012). Other forms of word knowledge include the word's grammatical behaviour, its frequency as well as its conceptual meaning (Mehrpour et al. 2010). Meara (2005) adds *automaticity* or how fast learners recognize and retrieve meanings from their mental lexicon to the concept of knowledge depth. Adams (2004) adds that a higher level of meaning construction during the process of reading depends on learners performing fast and efficient word recognition, word encoding and lexical access. Learners who cannot perform the named skills efficiently are deemed to be poor readers (Grabe & Stoller, 2002; Nassaji, 2003; Benhardt, 2005; Fukkink, Hustijn & Simis, 2005; Koda, 2005) and such learners find texts difficult to understand.

According to Stahl (2003: 146) "the most important factor in determining the difficulty of a text is the difficulty of the words". Word difficulty is a result of both small vocabulary size (breadth and lack of word knowledge forms discussed in the foregoing paragraphs). To illustrate the invaluable role played by vocabulary knowledge depth in understanding a difficult text, Nasaaji (2004) conducted a study which examined the relationship between ESL learners' depth of vocabulary knowledge, their lexical inferencing strategy use and their success in deriving word meanings from context. Inferencing refers to 'making 'informed guesses' about the meaning of unknown words based on the linguistic and non-linguistic cues available in the text' (Haastrup 1991: 40). The participants who took part in Nasaaji's (2004) study read a passage which contained 10 unknown words and attempted to derive meanings of the words from context. Since the study also sought to determine the strategies learners used, Introspective think-aloud protocols were used. A Word- Association Test (WAT) was also used to measure learners' depth of vocabulary knowledge. Results showed that learners who had stronger vocabulary knowledge depth used certain strategies more frequently to infer word meanings than those who had a weaker vocabulary knowledge depth and they used their strategies to infer words meanings from context with success. The study shows that depth of vocabulary knowledge makes a significant contribution to lexical inferential success when ESL learners are confronted with texts that contain many new words that could potentially hinder reading comprehension (Nassaji, 2004). Vocabulary depth has proved to be

very important particularly in extensive reading where word inferencing is a necessary skill (Nassaji, 2004).

From what has been said about vocabulary breadth and depth, it can be concluded that knowing more words (breadth) in depth (i.e. in great detail) makes AL learners better communicators and readers. Read (2000), Nation (2001) and Mehrpour et al. (2010) confirm that for learners to comprehend texts better, they require a large vocabulary size. Vocabulary breadth and depth are crucial in reading comprehension. Pretorius (2000), Tschirner (2004) and Cohen and Johnson (2010) recommend that vocabulary development should start early in children's lives through storybook reading so that by the time they reach high school they will have acquired a large enough vocabulary to enable them to succeed academically. Pretorius (2006) emphasizes the need for learners to acquire more vocabulary so as to be able to 'read to learn'.

The acquired receptive vocabulary (see § 2.6), which takes time to be transformed into productive vocabulary, is essential for written assignments at higher learning levels (Tschirner, 2004). It seems clear therefore, that the relationship between vocabulary breadth and depth can neither be overemphasized, nor underestimated. Although breadth and depth are largely seen as dichotomous from the foregoing discussion, Hatami and Takavoli (2012: 3) point out that the two are interconnected and their development is largely interdependent.

The next section will discuss factors that influence variations in vocabulary size.

2.6 Factors that influence variations in vocabulary size

Research in the reviewed literature reveals that individual learners have varying vocabulary levels and this variation is attributed to several factors such as different home environments, different socioeconomic backgrounds, maturation and varying academic abilities (Beck et al. 2002, 2013; Hoff, Laursen & Tardif, 2002; Rowe, 2008,).

Since the home is a place where a child is first exposed to language, Hoff and Naigles (2002) contend that properties of mothers' talk account for individual vocabulary differences. Children whose mothers talk to them more are found to be better placed in terms of vocabulary acquisition than children whose mothers talk to them less (Hoff & Naigles, 2002; Hoff, 2003a). What it means is that when mothers talk more to their children, they expose their children to more new words as well as multiple exposure of the words in the form of

repetition. Research reveals that more educated parents talk to their children more than lesser educated parents and they use quality communicative talk and more diverse vocabulary than parents who are less educated (Hoff, Laursen & Tardif 2003; Hoff, 2003a; Rowe, 2008). In most cases educated parents are aware that children learn by hearing and imitation hence they provide the appropriate stimuli that result in learning. Children who are advantaged from early childhood will acquire twice the vocabulary size than their disadvantaged counterparts (Moats, 2009). It seems clear that the socioeconomic status of parents plays a role in children's vocabulary development. According to (Rowe 2008: 201),

“educated parents who have knowledge about child development and who hold beliefs about child development that are more in line with information offered by experts, paediatricians and textbooks talk more, use more diverse vocabulary and longer utterances and produce a smaller proportion of directive utterances during their everyday interactions with their toddlers than parents who do not hold these beliefs” (Rowe 2008: 201)

In addition, parents with a higher SES can create supporting environments with print rich material (because they can afford to buy books, newspapers and even children's story books) that is essential for the development of early literacy skills, including vocabulary development (Rescorla & Alley, 2001; Roberts, 2008; Pretorius & Lephala, 2011) – something that is more unlikely to be done by parents with low SES (Bradley & Corwyn, 2002). Poor environments limit access to the much needed basic vocabulary that can be used as a scaffold to more vocabulary learning (Beck et al., 2013). Furthermore, the vocabulary size of disadvantaged children tends to be half the vocabulary size of advantaged children (Moats, 2009). A gap in vocabulary size is therefore seen between the children who come from different SES backgrounds, and research reveals that such a gap in vocabulary widens as children grow older (Biemiller, 2001).

Another factor that causes the variations in vocabulary size is maturation (Beck et al., 2002, 2013). Younger children know and understand fewer words than older ones in the same circumstances because older learners have had more time and more opportunities to interact with the language than younger learners (Nation, 2001; Beck et al., 2002; Hoff, et al., 2002). In addition, older learners have been in the classroom longer, have been exposed to more print through intensive and extensive reading and have developed learning strategies that increase their word power (Nation, 2001). Maturation is therefore a factor that results in children of different ages having different vocabulary sizes.

In the present review of related literature, learners from disadvantaged township and rural schools experience reading problems which tend to be, amongst others, a result of poor vocabulary development, often negatively affecting academic success (Pretorius, 2000; PIRLS, 2006, 2009, 2009; SACMEQ I, III and III). To increase the vocabulary size of those who already lag behind, the National Reading Panel (2000) recommends that explicit instruction of vocabulary should be mandatory. The NRP (2000) report states that although vocabulary knowledge alone does not necessarily guarantee reading success, the teaching of vocabulary equips learners with phonemic awareness and word identification skills which are necessary in reading. Biemiller (2005) concurs with the NRP's (2000) assertion and points out that if learners lack word identification skills and adequate vocabulary, they cannot succeed academically.

To increase the vocabulary size and also to transform the receptive vocabulary into productive vocabulary which contribute to academic success, the NRP (2000) makes a range of recommendations which include: direct instruction of target words, multiple or repeated exposure of the target words, teaching words that are useful for the understanding of the text, use of tasks that actively engage students in effective learning and designing written assignments that make active use of receptive vocabulary. However, to be able to plan for the learners with poor reading ability and poor vocabulary as reported in the International assessment such as PIRLS and SACMEQ, it is important to establish their productive vocabulary size first so that any intervention that is planned for such learners will address the problem from an informed viewpoint.

The present study therefore aimed to establish the existing productive vocabulary size of learners and teachers in a disadvantaged township district in Gauteng Province by using the Controlled Productive Vocabulary Level Tests (CPVLT).

The next section discusses the distinction between receptive and productive vocabulary.

2.7 Distinction between receptive and productive vocabulary

As mentioned earlier, vocabulary is broadly divided into receptive and productive vocabulary. Although this study will focus on productive vocabulary, it is necessary to discuss both. The distinction between receptive and productive vocabulary seems to be a bone of contention among scholars although most researchers agree that the distinction exists. Caspi and Lowie (2013: 437) acknowledge the fact that a gap exists between receptive and

productive vocabulary although the nature of the gap is not clearly defined. It seems more research needs to be conducted to clarify the issue of whether the two should be viewed as distinctly separate or not. Some researchers subscribe to the notion of a continuum between receptive and productive vocabulary (Melka, 1997; Nation, 1998; Schmitt et al. 2001). However, for the purposes of this study, receptive and productive vocabulary will be treated as separate entities since the study seeks to measure learners' and teachers' productive vocabulary levels.

As has already been discussed (see § 2.1), receptive vocabulary is that which is acquired through reading and listening while productive vocabulary is that which is acquired through speaking and writing (Al-Dersi 2013; Caspi & Lowie 2013). The two definitions set the two types of vocabulary apart. It is generally agreed among scholars that learners acquire receptive vocabulary first before they learn to use words productively (Nation, 2001; Roberts, 2008; Cohen and Johnson, 2010; Caspi & Lowie, 2013). If this is how words are acquired (first receive, then produce) the receptive-to-productive sequence of vocabulary acquisition also sets the two types apart.

Further examples of definitions show the differences between receptive and productive vocabulary - Waring (1997) contends that receptive vocabulary is when a learner is able to provide a specific first language (L1) translation of the second language word (L2), e.g. the *English- Zulu* translation as *L2 climb > L1-gibela* and productive vocabulary is when a learner is able to provide a second language L2 equivalent for an L1 word, e.g. *L1 gibela > climb L2*. On the other hand Laufer et al. (2004) describe receptive knowledge as retrieval of word form and productive knowledge as retrieval of the word meaning. Zhong (2011) contends that receptive knowledge is the ability to recognize and understand a word without being able to use it in speaking or in writing, while productive knowledge is the ability to use the word in speaking or in writing.

The underlining factor in the above mentioned distinctions is that for receptive vocabulary knowledge, learners should be able to recognize the form and retrieve the meaning of the word in listening and in reading (Nation, 1990) whereas in productive knowledge learners should be able to retrieve and produce the appropriate form of the word in the target language to express the meaning by speaking and writing (Zhong, 2011). Zhong (2011) however, does not mention what is involved in the progression of word knowledge from the reception stage

to the production stage and therefore seems to suggest that as long as the learner is not able to use a word in writing or in conversation, the word remains part of their receptive vocabulary.

Other scholars contend that productive and receptive vocabularies are not dichotomous. Melka (1997) views receptive and productive vocabulary as occurring in a continuum. According to this school of thought, knowing a word receptively gradually moves towards knowing it productively since knowledge of a word grows with better understanding of the word as more networking occurs in the learner's mental lexicon (Milton, 2009; Staehr, 2009) (see § 2.5.2). According to Melka (1997), it is difficult to know when exactly during the continuum the word ceases to be known receptively and when it begins to be known productively, which makes it difficult to categorize vocabulary as either receptive or productive. According to Caspi and Lowie (2013: 438) 'the transition from receptive to productive vocabulary is not immediate, linear and predictable'.

Nation (2011) attempts to show the differences between receptive and productive vocabulary by suggesting that for receptive vocabulary, words are recognized and understood when seen in print or heard and learners should be able to retrieve their meanings. When a word is heard or seen for the first time in a certain context and understood, and then seen or heard again, learners should be able to recall from memory the meaning of the word and try to apply it in a new context. However, the word is not yet used productively. The additional dimension of retrieving word meaning makes word knowledge receptive whereas in productive knowledge emphasis is on the ability to use it in one's own constructions without being prompted or in a controlled or a constrained context.

Melka (1997) adds another dimension of receptive vocabulary by pointing out that in receptive vocabulary, the stimuli which learners respond to are external, i.e. the spoken or the written texts. We hear the spoken word and read the written word from texts and we *receive* words from these sources; hence they are referred to as external stimuli. It is therefore clear that the skills that are needed to know a word receptively are recognition and understanding and these skills can be observed when the stimulus is external. On the other hand Hajiyeva (2015) suggests that the stimulus that results in productive vocabulary knowledge is not external as is the case with receptive vocabulary, but it is activated by other words. These other words are words that learners have already mastered and are part of their schemata and include synonyms, antonyms and collocations, to mention a few (networks in the mental

lexicon). The importance of background knowledge becomes evident as the already known words act as a scaffold to learning new words.

Another view of the receptive and productive distinction is offered by Caspi and Lowie (2013) who propose a four-level continuum which comprises word recognition, word recall, controlled production and free production. They agree that word knowledge is incremental suggesting that better word knowledge paves the way for productive use of a word. Schmitt et al. (2001: 79) are in agreement and contend that vocabulary knowledge is incremental. Schmitt (2000) explains that vocabulary is incremental by incorporating new words into the mental lexicon and by acquiring different aspects of a word. This signifies that when a word is known superficially, it is said to be receptive and as more knowledge of the word is acquired through multiple exposure (Waring & Takaki, 2003), production becomes possible. It is then that a learner is able to use the word in spoken and written form (Nation, 2001; Beck et al. 2013). The learner goes through stages of productive use of the word depending on the level of knowledge of the word.

The first stage of productive word knowledge is the ability to use a word in constrained contexts as when prompted by a teacher or researcher to do so, in which case it is called controlled productive vocabulary (Nation, 2001; Meara & Alcoy, 2010; Caspi & Lowie, 2013). The second stage is when a word is used in free writing as in writing essays; it is referred to as free productive vocabulary (Nation, 2001). This happens when word knowledge has reached the level of automaticity which results in effortless retrieval of the word meaning. Fitzpatrick et al. (2008) define *production* as the ability to recall a word as measured by its elicitation through L1 translation. The idea of correct translation from L2 to L1 indicates productive knowledge of the word even when a learner cannot use the word in the AL. There seems to be a clear distinction between receptive and productive vocabulary if the above differences are applied to word knowledge. Furthermore, the framework of knowing a word productively provided by Nation (2001) (see § 2.5.2), clearly distinguishes receptive from productive word knowledge. Learners who do not know words to the extent described in the framework only know the words receptively.

Other distinctions between receptive and productive vocabulary are in the terms that are used for each. Receptive vocabulary is also called passive vocabulary, comprehension vocabulary, understanding or recognition vocabulary while productive vocabulary is called active vocabulary, productive vocabulary, speaking or actual vocabulary (Nation, 2001; Willingham

and Price, 2009). As long as the vocabulary is not being used productively it is passive and can only be called active if it is used productively either in speaking or in writing.

In terms of size and speed of acquisition Zhong (2011:120) contends that ‘L2 learners’ receptive vocabulary is generally larger than their productive vocabulary knowledge because vocabulary learning is predominantly receptive’. It is not surprising that receptive vocabulary is larger than productive because it is easier to learn word forms than to learn word meaning. Receptive knowledge is mostly superficial knowledge of the words whereas productive knowledge requires knowledge of several forms of the word – this takes time to be mastered. With regard to speed of acquisition, Zhong (2011: 120) indicates that receptive vocabulary develops faster than productive vocabulary. However, as learners progress in their studies of the AL, the gap between receptive and productive vocabulary knowledge decreases. Learners increase their receptive word knowledge as they acquire deeper knowledge of the receptive vocabulary through instruction. Their productive vocabulary thus grows faster than their receptive vocabulary (Zhong & Hirsh, 2009; Zhong, 2011). Therefore, children need to acquire receptive vocabulary early in school as research shows that receptive vocabulary takes time to transform into productive vocabulary (Zhong & Hirsh, 2009; Yamamoto, 2011; Zhong, 2011). In essence, receptive vocabulary is passive vocabulary and if not activated by giving children tasks that actively use vocabulary such as writing assignments, the vocabulary is quickly forgotten (Yamamoto, 2010) and does not develop into productive vocabulary.

Meara (1996) and Webb (2005) contend that much research has focused on receptive vocabulary leaving productive vocabulary under-researched. This alleged neglect of productive vocabulary research seems to indicate that receptive and productive vocabulary can be separated and are therefore dichotomous. However, productive vocabulary research seems to be gathering momentum as scholars seem to have come to the realization that it is useful in supporting the literacy skills of listening, reading, speaking and writing (NRP, 2000; Meara & Alcoy, 2010). For instance, reading comprehension depends mainly on fluency and comprehension of words that comprise the text (NRP, 2000; Nation, 2001; Morin & Goebel, 2001). On the other hand vocabulary is essential for speaking confidently and in writing productions (Willingham & Price, 2009). Meara and Alcoy (2010) reported on a study conducted by Meara and Miralpeix (2007) which estimated the productive vocabulary of Spanish ESL learners by calculating the frequency distribution of words used by L2 writers.

They made the participants write two texts each, a 30 minute story from a series of cartoons with six pictures and a narrative. After a week, the learners repeated the activities. The handwritten stories were transcribed into machine readable formats and analysed for the number of words and the number of word types.

From the data, the mean number of words and word types was calculated. Results show that advanced learners wrote longer texts than the intermediate learners, an indication of higher proficiency in L2. The advanced group also produced more word types than the intermediate but had the same word types for both the cartoon story and the narrative. The mean Peterson estimates for both groups were reliable. Group one, the intermediate group had an estimated productive vocabulary of 2000 and group two, the advanced group, had an estimated productive vocabulary of 4900 words (Meara & Alcoy, 2010). What this study illustrates is that the size of productive vocabulary is a major predictor of writing proficiency. This study also seems to support the view that receptive and productive vocabularies are dichotomous.

To conclude this section of the review of related literature, from a pedagogical view point, the distinction of the two constructs is important for teachers. They should aim to expose learners to as many new words as possible through listening and reading activities and also try to help learners transform the receptive vocabulary acquired into productive vocabulary through speaking and writing activities as well as explicit vocabulary instruction. The present study thus seeks to measure the productive vocabulary size of Grade 6 township schools' ESL learners and teachers so that appropriate intervention if necessary can be planned for.

I will now turn to the relationship between receptive and productive vocabulary size.

2.8 The relationship between receptive and productive vocabulary size

While there are different views about the distinction between receptive and productive vocabulary, scholars have come to a consensus regarding the relationship that exists between the two constructs.

As discussed in section 2.6, scholars seem to concur that receptive vocabulary is larger than productive vocabulary although they do not agree on the proportion of the two as will be discussed later in this section (Webb, 2005; Schmitt, 2010; Zhong, 2011; Beck et al. 2013;). Webb (2005) suggests that receptive vocabulary is larger than productive vocabulary because most words are learnt receptively rather than productively. Webb (2005) further explains that

receptive tasks which lead to receptive vocabulary development (such as looking up words from the dictionary, matching words with meanings, guessing from context and learning word pairs) are more popular because they are easy to design and to complete than productive tasks, hence more words are known receptively rather than productively. Generally, people also hear new words from other sources such as people they interact with, the radio and the television, which adds greatly to receptive vocabulary knowledge (Nation, 2001). In addition, research reveals that any ESL learners' receptive vocabulary size is proportional to their productive vocabulary size meaning that the larger the receptive vocabulary the larger the productive vocabulary and the smaller the receptive vocabulary, the smaller the productive size (Laufer and Goldstein, 2004; Webb, 2008; Zhong and Hirsh, 2009). It therefore seems apparent that productive vocabulary is a by-product of receptive vocabulary.

Looking at this discussion from another perspective, scholars agree that generally, productive vocabulary knowledge 'feeds on' receptive word knowledge (Waring, 1997; Milton, 2009; Hajiyeva, 2015). The above claim signifies that learners start by knowing a word receptively without the ability to use it productively. At a certain point during language development, as learners have more experience with the word, they are able to use the word productively (Zhong, 2011; Milton, 2009; Hajiyeva, 2015). Words that are known receptively, depending on the learners' efforts to learn the word to deepen their word knowledge, sooner or later, transform into productive vocabulary. It requires multiple exposures to a word and practiced use of a word before it can be used with confidence productively (Waring, 1997, Nation 2001). It means therefore, that productive vocabulary knowledge is more advanced than receptive knowledge (Zhong, 2011).

Another dimension of the relationship that exists between the receptive and productive vocabulary is that receptive vocabulary grows faster than productive vocabulary (Laufer, 1998; Laufer and Pharibhakt, 1998). However, they add that the gap between the rates of growth of receptive and productive vocabulary closes as study proceeds. With regards to size, Waring (1997), Nation (2001) and Hajiyeva (2015), suggest that productive vocabulary tends to be half the size of receptive vocabulary while Milton, (2009) suggests that productive vocabulary is between 50-80% the size of receptive vocabulary. Research conducted by Zhou (2010) which investigated the receptive and the productive academic vocabulary knowledge of Chinese EFL learners in an attempt to determine the size of the receptive vocabulary in relation to the size of productive vocabulary found that the receptive vocabulary mean was

23.4% while the productive vocabulary mean was 10.6%. The results showed that the learners know academic vocabulary receptively more than productively. The proportions confirm findings reported in other research (Waring, (1997; Nation, 2001; Hajjyeva, 2015), that productive vocabulary is nearly half the size of receptive vocabulary. While a number of studies on the sizes of both the receptive and the productive vocabularies indicate that receptive vocabulary is larger than productive vocabulary, Nizonkiza and Van den Berg (2014) remain neutral about the proportion by stating that more research needs to be done in this area.

Another factor that needs to be considered on issues pertaining to receptive/productive vocabulary sizes relates to lack of early emergent literacy skills development (vocabulary development) and different socioeconomic environments (Rescorla & Alley, 2001; Hoff, 2003). Most children from lower SES homes do not attend pre-schools because of poverty reasons (Rescorla & Alley, 2001) hence such children's receptive and productive vocabularies remain small. Even where attendance does occur, there seems to be "very little measurable impact for the poorest three school quintiles" (Kotze, 2015:1). Christian, Morison & Bryant, (1998) contend that child care plays a compensatory role by providing more superior opportunities for learning than those found in the home. More so if the pre-schools have qualified teachers, the effects of poverty on intellectual development is lessened (Christian, Morison & Bryant (1998). This signifies that learners who attend pre-schools have opportunities of building a bigger receptive and productive vocabulary as well as background knowledge through storybook reading which is essential for later reading (Rescorla & Alley, 2001; Roberts, 2008; Pretorius & Lephala, 2011).

The different home language environments of ESL learners also affect their receptive/productive vocabulary proportions (Rowe, 2008). Learners who come from a background in which the AL is spoken often, have more receptive and productive knowledge than learners who have little exposure to the target language (Rowe, 2008). For learners who only hear the language in the classroom, the difference between their AL receptive and productive vocabulary is big (Webb, 2005). The length of time of the learners' exposure to AL, and as mentioned by Webb (2005) the learning activities used by teachers in the classroom (which in most cases are receptive type of activities) play a role in determining the receptive/productive vocabulary sizes. Webb (2008) conducted a study in which the size of the receptive and productive vocabulary in L2 learners was investigated using VLT tests with different target

words for the two tests. The study used an experimental design. The two tests focused on two aspects, which were translation and the fuller knowledge of the words. The tests focused on form and meaning.

Webb (2008) found that on the translation tests, learners' receptive vocabulary was larger than their productive vocabulary. Assessment of the fuller knowledge of the words in both aspects indicated that receptive vocabulary was also larger than productive vocabulary in all the three frequency levels namely the 2000, 3000 and the 5000 word levels. Another finding was that the difference between the receptive and the productive vocabulary sizes increased as the frequency of the words increased. Webb (2008) thus concluded that the receptive vocabulary size gives an indication of a learner's productive vocabulary size.

Research indicates that not all words known receptively can be used productively. Fan (2000 in Caspi & Lowie, 2013), reports that close to 75% of words known receptively can be used productively. This means that 25% of words that are known receptively are not necessarily used productively. On the other hand Webb (2008) suggests that less than 10% of the words known receptively are not known productively. While the two schools of thought differ, the fact remains that receptive vocabulary is bigger than productive vocabulary. It is interesting to note that they both agree that a threshold should be reached which marks the point at which receptive vocabulary transforms into productive vocabulary. The threshold aspect will be discussed in section 2.9.

To conclude this section, it should be borne in mind that the larger the receptive vocabulary size, the larger the productive vocabulary, a phenomenon which should be the main focus of teachers (Laufer & Goldstein, 2004; Webb, 2008; Zhong & Hirsh, 2009). Oxford and Scarcella (1994) and Zimmerman (1997) concur that children with bigger productive vocabularies participate more in class than children with smaller productive vocabularies. Their reasoning is that when learners are more confident with the language their participation in class is increased leading to even greater proficiency in the L2. Therefore, receptive vocabulary building can be developed by exposing learners to an environment which is word rich either orally or in the form of reading material (Fleisch, 2008). Schmitt, (2000: 173) concludes that 'the learning of basic words cannot be left to chance, but should be taught as quickly as possible because they open [...] the doors of further learning.'

It is therefore important that words, especially at the 2000 word level, are taught as soon as possible to young ESL learners so as to lay a strong productive vocabulary foundation that will enable them to write, read and also to comprehend what they read when they grow older.

2.9 Productive Vocabulary threshold

A ‘threshold’ in the context of vocabulary learning refers to, ‘the boundary between not having and having enough vocabulary knowledge for executing various language skills such as reading comprehension and guessing word meanings from context successfully (Kashevarz 2009: 1). There are several types of thresholds that learners need to surpass to enable them to perform the various language skills satisfactorily. In this section I will discuss the reading comprehension threshold which is determined by lexical coverage of a text. Laufer and Ravenhorst (2010: 16) define lexical coverage as ‘the percentage of words that a reader understands’. Laufer and Ravenhorst-Kalovski (2010: 16) point out that lexical coverage is related to *text coverage*, *sight vocabulary* and the concept of *adequate*. Sight vocabulary refers to words that are familiar to readers to the extent that they are known even out of context and adequate refers to reasonable levels of comprehension (Laufer & Ravenhorst-Kalovski, 2010: 16).

At this point, it is important to provide text coverage at various levels of the VLT as presented in the Brown Corpus. The Brown Corpus consists of a list of approximately one million words compiled from 500 English text samples from 15 different genres. According to Meara and Alcoy (2010), there is a close relationship between vocabulary size and coverage of a text and the ease with which a learner will be able to cope with the text. Vocabulary coverage refers to the percentage of words known by a reader in a text. Nation (2001) actually provides coverage figures for each successive 1000 lemmas from the Brown Corpus to support the above claim.

Table 2.1: Levels and Text coverage from Brown Corpus

1000 word (Lemmas) levels	% coverage of the text
1000	72
2000	79.7
3000	84
4000	86.7
5000	88.6
6000	89.9

Adapted from Nation (2001:15)

The more words that are known at the higher frequency levels the higher the coverage of the text and the better the learner will be able to understand the text read. For example, knowledge of the 5000 word level gives text coverage of 88.6% (Nation 2001). In other words, a reader with knowledge of the 5000 most frequently used words will understand nearly 89% of any English text.

Nation (2001) however explains that the percentage coverage at each level depends on the type of text read (see Table 2.2).

Table 2.2: Text types and coverage

Level	Conversation	Fiction	Newspaper	Academic texts
1 st 1000	84.3 %	82.3%	75.6%	73.5%
2 nd 1000	6 %	5.1%	4.7%	4.6%
Academic	1.9 %	1.7%	3.9%	8.5%
Off list words	7.8%	10.7%	15.7%	13.3%

Adapted from Nation (2001:17)

Table 2.2 indicates that different types of texts have a different percentage of coverage depending on whether the text is a conversation, fiction, newspaper or an academic text. For example, knowledge of the 1000 word level gives coverage of 84.3% for conversations, 82.3% for understanding fiction, 75.6% for comprehending newspapers and 73.5% for reading academic texts. A comparison of the 1000 word level and the 2000 word level in all four text types indicates that there are small percentages of words from the 2000 word level found in the four text types. The 2000 word level is the level that is most crucial for basic communication and academic success since most of the words in this level are generic words and occur across domains (Nation, 2001). A further analysis of Table 2.2 indicates that academic words which are considered crucial for academic success also occur in very small

percentages. Therefore, these words should only be increased in AL learners' vocabulary through instruction and extensive reading (Nagy et al., 1985; Nation, 2001).

Regarding vocabulary threshold for reading comprehension, Laufer and Ravenhorst-Kalovski (2010) point out that, studies have different findings regarding vocabulary thresholds. Hu and Nation (2000) findings show that at 80% coverage learners cannot comprehend what they read which suggests that a vocabulary size below the knowledge of 3000 word families does not enable learners to comprehend what they read. There are too many words learners do not understand in the texts (1 word in every 5 words in a text). Reading with comprehension begins when learners acquire vocabulary size of 3000 word families (Laufer, 1998). Nation (2001) therefore recommends that learners need to surpass a threshold of at least the 3000 word families to be able to read authentic texts. If a learner has not crossed the threshold, adequate comprehension of written texts is not possible. Hatami and Takavoli (2012: 1) also state that knowledge of 95% of words in a text means that learners need to know about 3000 word families for minimal comprehension. While Laufer (1998) and Hu and Nation (2000) concur with Hatami and Takavoli (2012) on the number of words that enable comprehension at 95% coverage (3000 word families) Yamamoto (2010) argues that knowledge of the 3000 word families is enough only for **minimal** reading and not for advanced reading.

For reading for pleasure, Hirsh and Nation (1992: 693) suggest that a learner needs a vocabulary size of 5000 word families to read a short unsimplified novel for pleasure with reasonable ease. Furthermore they state that the most frequent 2000 word level does not provide adequate coverage for pleasure reading (Hirsh & Nation, 1992). Nation (2001), states that knowledge of 95-98% of words in a text is the threshold for adequate comprehension of texts. However, if a learner fails to cross the threshold, then comprehension is not possible (Nation 2001).

Recent research indicates that 98-99% of the words in a text should be known for sufficient comprehension to occur and to read a variety of texts in English. Therefore, learners need to know 8000-9000 word families (Hatami & Takavoli, 2012: 2). Adequate comprehension is achieved when learners achieve 98% coverage (Laufer, 1998; Hu & Nation, 2000; Laufer & Ravenhorst-Kalovski, 2010). To achieve adequate comprehension, Laufer and Ravenhorst-Kalovski (2010) suggest that learners require knowledge of 5000 word families. Nation (2006) concurs with Hu and Nation (2000) but suggest that 98% coverage requires

knowledge of the 8000-9000 word level. It is clear that not all researchers agree about what the lexical threshold is when it comes to adequate comprehension.

Keshavars (2009: 6) approaches the threshold issue by considering the number of unfamiliar tokens per 100 tokens and the number of lines of a text containing one unfamiliar word. Table 2.3 provides a summary of the assumptions.

Table 2.3 Unfamiliar tokens per 100 tokens and lines containing unfamiliar words

Text Coverage in %	Density of unfamiliar in familiar tokens	Number of text lines per unfamiliar word
99	1 in 100	10
98	1 in 50	5
97	1 in 33	3.3
96	1 in 25	2.5
95	1 in 20	2
90	1 in 10	1
80	1 in 5	0.5

Adapted from Keshavars (2009: 6)

The Table shows that if for instance learners have 90% text coverage of the running words in a text then one in every 10 words is likely to be unknown. It also means that at least one word is unknown in every line of the text. The more words are known in each line in a text, the better the comprehension of the text. Nation (2006: 61) sums it up by suggesting that ‘to know how much vocabulary is needed for adequate comprehension to occur one needs to know how much unknown vocabulary can be tolerated in a text before it can interfere with comprehension’.

To know how far ESL learners’ vocabulary is from the reading comprehension or listening threshold, it is necessary to know their vocabulary size and that can only be achieved by testing them. Once the learners’ vocabulary size is established teachers tailor-make their vocabulary instruction accordingly (Nation, 2001; Laufer & Nation, 1999; McConnel, 2008; Zimmerman, 2010). Learners are required to reach or cross the threshold levels required to perform adequately in the four language skills, namely speaking, listening, reading and writing (Staehr, 2009; Al-Dersi, 2013) as well as general academic performance (Zareva et al., 2005). This requires knowledge of different types of vocabulary. Measuring learners’ vocabulary assists teachers to assist their learners achieve their language learning goals.

Pedagogically, if measuring is conducted at the beginning of a language course, teachers will be able to establish language goals for the AL courses (Nation, 2001; Schmitt, 2000). Listening and reading are receptive skills and they require learners to have a large receptive vocabulary. Therefore, it is important for teachers to measure vocabulary breadth because vocabulary is important in the performance of these skills (Nation, 2001; Milton, 2009). Speaking and writing are productive skills hence it is important to measure the learners' level of productive vocabulary since knowledge of this kind of vocabulary enables learners to be competent in writing and speaking (Al-Dersi, 2013: 75).

Readers should be able to interpret the meanings of what they read by applying their word depth knowledge skills, which are a result of receptive and productive vocabulary knowledge. Therefore, teachers should know what levels of receptive and productive vocabulary learners have so that they can plan how to increase the learners' vocabulary depending on their needs so as to enable them to reach or go beyond the threshold levels as required by the different skills. In addition, knowledge of productive vocabulary can provide an indication of the size of learners' receptive vocabulary which is estimated to be twice the size of productive vocabulary (Waring, 2014). Therefore if teachers measure learners' receptive vocabulary size, they can estimate their learners' productive vocabulary size to some degree of accuracy. They will know which learners require assistance in vocabulary development and which learners can learn independently. Researchers and teachers also need to establish the rate of learners' vocabulary growth so that they know the kind of attention that is required for a particular group of learners (Laufer & Nation, 1999: 34). Tests are used for diagnostic purposes and therefore knowledge of the size of vocabulary helps to establish which aspects of language are being neglected.

Productive vocabulary plays a vital role in language use and acquiring it is usually a problem for many learners (Nizonkiza & Van der Berg, 2014). Freebody and Anderson (1983a: 278) add that measuring vocabulary helps teachers and researchers to understand the cognitive processes involved in reading and vocabulary acquisition. It also helps researchers to deepen their understanding of the relationship between reading comprehension and vocabulary (Freebody & Anderson, 1983a).

It is therefore an important aim of this study to measure the productive vocabulary size of learners since it would seem that productive vocabulary is a good indicator of learners' ability to use words without being prompted, as is required in academic literacy. The size of

learners' productive vocabulary also indicates learners' reading ability and their level of comprehension of written texts which also impacts on academic achievement.

Having discussed vocabulary threshold for reading comprehension and the purpose of testing, I now turn to what is involved in knowing a word.

2.10 What is involved in knowing a word?

Research shows that explaining what is involved in knowing a word is not a simple matter since it involves a variety of skills and knowledge that are difficult to measure (Meara, 1996; Nation, 2001; Beck et al., 2013). Several explanations have been put forward in an attempt to explain what knowing a word entails. Meara (1996) describe knowing a word as passing from passive to active states on a continuum, much like the proponents of the argument that vocabulary can be described as receptive and productive. However, Meara (1996) contends that the progression of word knowledge does not occur smoothly but rather occurs in distinct stages and that there is a threshold that should be reached before words pass from passive to active use. In agreement with Meara (1996) Laufer (1998) points out that 'knowing a word is not an all-or-nothing phenomenon'. Rather, word knowledge starts from no knowledge to partial knowledge to full knowledge (Laufer, 1998). This signifies that the first time one hears a new word, partial knowledge of the word is acquired. The knowledge is only limited to that one context. Further experiences with the word in new contexts increases the word knowledge until a level is reached where the word is used productively with confidence (Laufer, 1998; Zhong, 2011). In other words, there are several components of word knowledge that make up complete word knowledge (Zhong, 2011) and complete word knowledge progresses in distinct stages, as mentioned above.

Schmitt (2000: 5) introduces in a new dimension of word knowledge and contends that 'mastering a word means to learn its register, association, collocation, grammatical behaviour, written form, spoken form and its frequency'. Schmitt (2000) largely seems to concur with Nation (2001) by stating that knowing a word involves knowing its form, meaning and use. On the other hand, Moghadam (2012: 557) contends that knowing a word involves 'knowing the knowledge of a written and a spoken form, morphological knowledge, knowledge of word meaning, collocation and grammatical knowledge, connotative and associational meaning, and the knowledge of social or other constraints of use.'

From the above information it is clear that most ESL learners are unlikely to fully know all the words they learn to the extent that is described by Schmitt (2000) or Moghadam (2012) above. Most of them remain with partial knowledge of the form of words, partial understanding of their meanings and partial ability to use them in spoken or in writing. However, it should be borne in mind that word learning is an incremental process which starts from no knowledge, to partial knowledge and progresses to full knowledge (Schmitt, 2000; Schmitt et al., 2001; Nagy and Scott, 2007). Willingham and Price (2009) add that L1 speakers continue to expand their word knowledge into adulthood. Therefore, words can be known at varying degrees from partial to precise knowledge and with scaffolding full word knowledge may be attained.

Henriksen (1999) describes three dimensions of word knowledge namely the *partial to precise dimension*, the *depth dimension* and the *receptive to productive dimension*. In the partial to precise knowledge, word knowledge starts with no knowledge to partial knowledge to full or thorough knowledge, (Beck et al., 200; Nation 2000). Unlike Laufer (1998), Henriksen (1999) does not consider ‘no knowledge’ as part of the stages of word knowledge.

The depth dimension focuses on the quality of word knowledge. A learner who has in-depth knowledge of a word should be able to infer the meaning of the word, be able to give its synonyms, antonyms, hyponyms as well as its collocation (Henriksen, 1999). Wood and Harmony (2008) offer another dimension of word knowledge which applies to content subjects such as the polysemy or multiple meanings of words. They argue that learners should be able to know the difference between for instance *table* as in *periodic table* in science and *table* in mathematics. Henriksen (1999) further contends that word depth knowledge involves the aspect of competence in which case it is hinged on the learners’ competence in the second language.

The *receptive to productive* dimension is the third dimension in which learners start with word recognition and progress to production (Willingham & Price, 2009; Nizonkiza & Van den Berg, 2014). In all three dimensions, the incremental feature is present as better knowledge of the word is acquired with increased experience and exposure to the word (Schmitt et al., 2001). In my study I acknowledge the fact that word knowledge should grow so that as the quality of knowledge grows learners become linguistically competent with words. Pedagogically this implies that teachers should understand the different stages of word

knowledge so that they use appropriate instructional methods that enable the development of all word knowledge stages.

The next section will discuss the relationship between productive vocabulary and the four language skills namely reading, writing, speaking and listening.

2.11 The importance of vocabulary

Reading and vocabulary have a unique relationship. Cohen and Johnson (2011: 358) state that there is a unique reciprocal relationship between reading comprehension and vocabulary. Rupley (2005: 203) adds that ‘vocabulary and reading comprehension share a nurturing relationship, each supporting the growth and development of the other’ If vocabulary supports reading it automatically supports all the four language skills namely speaking listening and writing. I will discuss these skills separately.

2.11.1 The relationship between productive vocabulary and reading

A report compiled by the National Reading Panel (2000) on how to teach children to read, reveals that vocabulary is one of the ‘core components’ that are important in successful reading. Pearson, Herbert & Kamil (2007) contend that children with better vocabulary knowledge read better while more reading results in vocabulary growth. In addition, it is generally agreed that vocabulary knowledge correlates with reading comprehension. The implication is that learners who know more words productively comprehend texts better than learners who know fewer words. Moreover, productive vocabulary knowledge which also includes decoding and pronunciation of words is crucial as learners should be able to decode and pronounce words correctly so that the words make sense to them during reading. Decoding and pronouncing words are part of productive knowledge (Nation, 2001), and the ability to decode and pronounce correctly paves the way for reading comprehension. It is imperative therefore for children to develop decoding skills for better reading comprehension. Pretorius & Lephala (2011) describe decoding skills as:

‘Lower level reading skills which include the reader’s knowledge of sound-letter relationships, in the alphabetic writing system; the ability to perceive and manipulate sounds within a linguistic sequence; and the ability to recognize words rapidly and accurately’ (Pretorius & Lephala, 2011: 3)

Because English language is an alphabetic language, a learner needs to generate correct sounds from the letters and blend the sounds into words that are recognized by others. The phonics approach to learning to read thus plays an invaluable role as learners will be able to decode words, make phrases and sentences before they are able to assign meaning to whole texts (Nasaaji, 2003; Pretorius & Lephala, 2011; Liu, 2010). In addition to decoding, learners should be able to recognize words accurately and rapidly so as to read successfully. However the said knowledge should be combined with fluency, which is described as ‘the ease, speed and accuracy with which reading takes place’ resulting in comprehension (Pretorius & Lephala 2011: 3).

Reading comprehension, which in this section refers to the Top-down process of reading, is a prerequisite skill for ‘reading to learn’ in order to achieve academically (Pretorius & Lephala, 2011). Huang (2012) defines reading comprehension as a complex process of using lexical and grammatical knowledge to infer meanings of unknown words from context and further states that a learner’s knowledge of word meanings controls comprehension of texts. If learners lack in vocabulary knowledge and are not fluent readers, they are bound to have difficulties of comprehension as revealed by learners in Pretorius and Lephala (2011) study. Since Curtis, (2001) and Tschirner, (2004) reveal that children with poor productive vocabularies tend to have reading problems, it is therefore, important that children acquire a large vocabulary size especially through the ‘pushed out’ activities (Webb, 2007) so as to enable them to read with comprehension.

Research shows that reading and particularly reading comprehension in South African township schools is problematic (NRP, 2000; Chisholm, 2004; Pretorius, 2005; PIRLS, 2006; Pretorius and Lephala, 2011). SACMEQ, (2005, 2009) reports that children in grades one to six read two grade levels below their own grade in English. In fact, Pretorius and Lephala, (2011) in their study on the reading abilities of Grade 6 township school learners in the two schools tested reveal that although there were some learners who were fluent readers particularly those in the 75th percentile, reading comprehension was generally low (as revealed by the low comprehension mean obtained). Some learners read “slowly and haltingly [...] at a reading rate expected of Grade 1 beginner readers and their comprehension levels similarly were very low” Pretorius & Lephala (2011:15). This indicates that reading speed, which is also a measure of reading proficiency, is also determined by vocabulary size (Webb, 2007). If learners read slowly, meaning construction

of a text is compromised hence comprehension is hampered. Pretorius and Lephala (2011) study also reveals that there were even non-readers at the 25th percentiles in both schools. The poor reading performance of the Grade 6 learners in the study is a problem that can be traced back to the pre-school years of the children. The low SES background of the learners with print poor home environments is the major cause of reading failure at Grade 6 (see §2.6) Staehr (2008: 139) points out that vocabulary size correlates with reading comprehension. As has already been mentioned that more reading results in vocabulary growth, it seems most of the learners in this study generally are not proficient readers hence they have low vocabulary, hence the low comprehension means recorded in the study.

Cohen & Johnson (2011: 358) conclude that since “vocabulary knowledge assessed in the first grade predicts over 30% of reading comprehension in the 11th grade”, vocabulary should be the main focus of pre-schools to ensure that learners’ vocabulary is developed early in their school life through storybook reading.

Vocabulary plays a vital role in education especially with regards to academic achievement (Nagy, 1988; Zareva et al., 2005; Nizonkiza, 2016). In ‘reading to learn’, a good vocabulary size helps learners to understand texts they read hence Cohen and Johnson (2011: 358) posit that more reading results in vocabulary growth which in turn results in further comprehension. Academic failure at school is often attributed to the lack of understanding of texts hence Rupley (2005: 203) points out that “vocabulary and reading comprehension share a nurturing relationship each supporting the growth and development of the other”. Klapwijk (2012) observes that in the 2005 Grade 6 Intermediate Phase Systemic Evaluation, 63% of learners scored at the ‘not achieved’ level in the Languages of Learning and Teaching (LoLT) and in the Language of learning in the Thinking and Reasoning outcome they scored an average of 31%. These scores indicate that in open-ended questions learners do not understand what they read and ultimately cannot formulate their own answers. On the other hand, in multiple choice questions where learners did not have to formulate their own answers, learners were able to score 49%. Harmony (2002) notes that many students continue to struggle with comprehension because of limited vocabulary knowledge, and in particular knowledge of the 2000 word level. Bromley (2004, 2007) concludes that vocabulary knowledge promotes reading fluency, boosts reading comprehension, improves academic achievement and enhances thinking and communication. Research also indicates that word learning can improve the capacity to learn (Bintz, 2011; Manzo, Manzo & Thomas, 2006;

Pretorius & Lephala, 2011). Teachers are therefore encouraged to help learners to build a minimum vocabulary of at least the 3000 word level followed by strategies that learners can use to understand low frequency words (Nagy, 1988; Laufer, 2004; Hatami & Takavoli, 2012).

Productive vocabulary knowledge is crucial for the development of other language skills, such as writing, speaking and listening (Staeher, 2008; Willinham & Price; 2009; Schmitt 2010). It is also noted that children with larger vocabularies find reading easier, read more widely and do better at school (Manzo, Manzo & Thomas, 2006; Bintz, 2011). The Matthew Effect for reading postulated by Stanovich (1986) explains that children who struggle with reading tend to read less, and therefore struggle to increase their vocabulary, in contrast to good readers who read more and develop a stronger vocabulary. As both the skilled readers and less skilled readers progress through the grades, the gap between the skilled and the less skilled readers becomes increasingly pronounced (Roberts, 2008; Cohen and Johnson, 2011).

Why are some texts more difficult to understand than others? Stahl & Jacobson (1986: 309) points out that ‘the proportion of difficult words in a text predicts text difficulty’. This implies that if there is a high proportion of difficult words in a text, learners will have problems understanding that text. However, readers do not need to know all the words to comprehend a text. Laufer (1997: 23) empirically showed that the vocabulary threshold for minimal reading comprehension is knowledge of 3000 word families. In addition, learners need to apply L1 reading strategy transfer skills to L2 reading in order to comprehend texts written in the L2 (Laufer, 1997). Reader’s general vocabulary size also predicts how well that reader can understand text (Stahl & Jacobson, 1986: 309).

The next section describes the relationship between productive vocabulary and writing.

2.11.2 The relationship between productive vocabulary and writing

Knowing words productively is important in producing quality writing. Daller and Phelan (2007) contend that teachers’ use lexical sophistication to rate the quality of any written work. According to Daller and Phelan (2007) learners who are able to use low frequency words in their writing are regarded as linguistically competent learners hence the texts they produce are rated highly. If learners produce a text that contain a good proportion of the 2000 word level as well as low frequency words such learners are described as having what Tanaka (2012) refers to as lexical competence. Meara (2005) and Meara & Fitzpatrick (2000)

contend that vocabulary size predicts writing and it separates linguistically competent learners from the poor learners. It is from the learners' writing that one can measure the quality of their productive skill. In addition, Nation & Laufer (1995) found that learners with large vocabulary used fewer high frequency words and more low frequency words than learners with small vocabulary in composition written work. They also found that learners with large vocabulary also use more academic words in their writing than learners with small vocabulary. Another view from Schoonen et al. (2003) adds that the quality of a text is determined by the number of low frequency words and academic vocabulary used in the text. From the above information it is apparent that productive vocabulary knowledge determines the quality of written work hence Christ & Wang (2010) advocate that teachers need to provide explicit instruction of low frequency and academic vocabulary.

While explicit instruction is believed to increase vocabulary growth (Webb, 2007; Christ & Wang, 2010; Meara & Alcoy, 2010), Nation (2001) indicates that vocabulary instruction does not add much to the development of vocabulary since the number of words learnt through explicit instruction is too small. Rather, teachers should focus on other aspects of language such as grammar since most words are learnt through extensive reading and also through interacting with other learners in the additional language. However, (Webb, 2007; Christ & Wang, 2010) maintain that most low frequency words are not encountered in spoken discourse and therefore require explicit instruction. Therefore, learners' attention should be focused on the low frequency words and the 2000 word level through the use of writing activities that actively engage them, so that their productive vocabulary grows and their quality of written work improves (Webb, 2007; Meara & Alcoy, 2010).

Sedita (2005: 2) points out that productive vocabulary knowledge helps us to express our ideas precisely hence, "it is the glue that holds stories, ideas and content together". If learners do not have enough productive vocabulary, they will not be able to express their thoughts and ideas with the precision they desire. Webb, (2008) conducted a study in which the size of the receptive and productive vocabulary in L2 learners was investigated using VLT tests with different target words for two tests. Webb, (2008) found that learners' receptive vocabulary was larger than their productive vocabulary. Another finding was that the difference between the receptive and the productive vocabulary sizes increases as the frequency of the words increases. Clearly this means L2 learners know most words at lower frequencies more receptively than productively. It is therefore important to narrow the gap between receptive

and productive knowledge of words by providing explicit instruction of the 2000 and word levels (Vermeer, 2001).

In the next section the relationship between productive vocabulary and speaking is described.

2.11.3 The relationship between productive vocabulary and speaking

Research indicates that vocabulary knowledge plays an invaluable role in speaking (Meara & Fitzpatrick, 2000; Staehr, 2009; Schmitt, 2010; de Jong et al., 2012; Koizumi & In'nami 2013; Zareva et al., 2005). According to Meara & Fitzpatrick (2000: 20) “communicative effectiveness is achieved more successfully by learners with a larger vocabulary than by learners with a more detailed command of a smaller one”. The statement signifies that proficiency in a language is determined by the number of words known productively (Henricksen, 1999; Zareva, 2005; Zareva et al., 2005).

Although there are several processes involved in speaking, for this study, I will mention only three aspects as discussed in Koizumi & In'nami (2013: 904) study which together result in speaking proficiency. These aspects include fluency, accuracy and syntactic complexity. De Jong et al. (2012: 1) define fluency as “the smoothness and ease of oral linguistic delivery”. Learners who are fluent tend to retrieve words from their mental lexicon with ease and utter them effortlessly. Accuracy involves the production of grammatical sentences in speech, and syntactic complexity involves using words in speech or discourse in a complex but correct word order (Koizumi & In'mani, 2013: 904). All three aspects seem to be determined by vocabulary size (breadth) and depth (how well a word is known) (see § 2.5). In addition, the speed with which words are retrieved from the mental lexicon determine how smoothly speech is produced (Kiozumi & In'mani 2013: 904). The study confirmed a correlation between the L2 vocabulary and the L2 speaking proficiency. The findings reveal that vocabulary holds a central position in formulating utterances (Zareva et al., 2005; Zhong, 2011).

Having described the concept of productive vocabulary and its relationship with various language skills, the next section discusses the issue of how much vocabulary must be taught to ESL learners.

2.12 How much vocabulary should be taught?

Three schools of thought are evident regarding vocabulary acquisition. One school of thought holds that vocabulary is acquired incidentally without explicit instruction (Nagy, Herman & Anderson, 1985; Willingham & Price, 2009). This school of thought supposes that through reading, prior knowledge and word saliency, learners are expected to learn and acquire vocabulary on their own. Nagy et al. (1985) investigated whether students acquire measurable vocabulary knowledge about unfamiliar words while reading natural texts. Their participants were 57 Grade eight students of average and above average reading ability who read either an expository text or a narrative text of about 1000 words in length. Fifteen target words were selected from either text for assessment. The test was followed by an individual interview and a multiple choice test designed to test partial knowledge of the words from context. Small but statistically significant gains were realized from the assessments indicating that;

“incidental learning [of words] from context during free reading is the major mode of vocabulary acquisition during the school years and the volume of experience with written language, interacting with reading comprehension ability is the major determinant of vocabulary growth” (Nagy et al. 1985: 234).

Nagy (1988: 3) in a report on teaching vocabulary for increased comprehension concludes that what is needed to produce vocabulary growth is not more vocabulary instruction but more reading. Nagy (1988) therefore suggests that reading is the major contributor of vocabulary growth.

The second school of thought advocates for direct instruction where learners use self-learning strategies, the dictionary, morphology and mnemonics to learn new words (Laufer, 2003; Pulido, 2003; Moats, 2009). The assumption is that deep word learning takes place through active engagement with words, a phenomenon that does not happen during free reading. The third school of thought, supports authentic word experience in which words are taught in context after they are selected from the literature and read to the learners (Dixon-Krauss, 2001; Blachowicz & Fisher, 2006)., Whichever school of thought is followed, the question asked is how many words can / should be taught in any vocabulary teaching session?

Nation (2001) contends that 6-8 words can be taught over a period of 5 to 9 days while Archer and Hughes (2011) suggest that an average of 3-5 words per passage is realistic if meaningful learning is to take place. However, depending on the nature of the learner and the vocabulary to be taught, teachers should use their discretion and their sense of judgment and

plausibility about the number of words to be taught. They should however bear in mind that more than 10 words will be overwhelming for learners (Nation, 2001; Hughes, 2011). Some studies indicate that teachers should not be overly concerned about teaching low frequency words as less than 5% of these words can be found in any given text (Nation 2001; Beck et al., 2013). Focus should therefore be on words at the 2000 word level, which, as mentioned previously, is deemed crucial for the understanding of written texts and considered important for basic spoken communication.

It is also important that word learning should involve encountering words several times in different contexts, as much as 7-16 times if time permits (Blachowicz et al., 2006; Nagy & Scott, 2006; Bintz, 2011; Nizonkiza, 2014). Nagy & Scott, (2006) contend that multiple exposures to the word results in easy word learning and teachers should not neglect this aspect. However, the idea of multiple exposures to the word for better learning of the word is rather controversial. Nagy et al. (1985) argue that a single encounter can result in a substantial amount of vocabulary growth. If learners are to develop deeper word knowledge, then multiple encounters with the word are required. With the information gathered from the reviewed literature, it follows therefore that vocabulary teaching should not be a ‘once off thing’ and should not be done haphazardly. It should be systematic based on principles that guide vocabulary teaching and learning (Nagy et al., 1985; Blachowicz et al., 2006).

In conclusion, a synthesis of the information from the reviewed literature in the preceding sections shows that productive vocabulary knowledge is a factor that plays a vital role in literacy in general, in reading comprehension, writing and in speaking. The development of learners’ productive vocabulary must not be taken for granted or left to chance. Learners need to increase their productive vocabulary levels to achieve academically. Learners need to possess large amounts of words, including at the very least competency of the 2000 word level, and to become sufficiently academically literate. Vocabulary development, therefore, must form part of everyday classroom instruction in particular, and the curriculum in general.

In the next section, the Curriculum and Assessment Policy Statement (CAPS) policy on vocabulary teaching to ESL learners is discussed as well as how teachers implement the policy.

2.13 CAPS and the development of vocabulary

Research indicates that the development of lexical knowledge is regarded as central to language learning (Nation, 2001; Schmitt et al., 2001; Rupley, 2005; Hajiyeva, 2015) so one would expect vocabulary development to be addressed in the South African school curriculum. But to what extent is this done? The Department of Education through CAPS (Curriculum and Assessment Policy Statement 2011) states explicitly what the vocabulary size that must be achieved by Grade 6 First Additional Language (FAL) learners from Grades 4 to 6. The CAPS (2011) divides the required vocabulary into two categories, namely common spoken words and reading vocabulary. CAPS (2011) states that at Grade 6 level, learners should demonstrate vocabulary knowledge of common spoken words of between 3250 words at the end of the first term, to 5500 words by the end of the fourth term. The policy does not state the word levels that teachers are expected to teach nor does it provide a word list for explicit instruction. By the end of the year learners in Grade 6 are expected to have gained 2250 new words. This instruction however does not take into consideration the vocabulary levels of learners at the exit of the Foundation Phase (Grade 3) where the medium of instruction is mainly mother tongue. In addition, most learners from disadvantaged backgrounds (low SES communities) come from print poor homes and rarely have story books read to them during their pre-school years; according to Roberts (2008) they come to school without a sizeable amount of background knowledge and vocabulary. One is therefore left wondering how 2250 new words must be taught to learners who might lack an adequate vocabulary foundation at the end of Grade 6.

In the second category of reading vocabulary, the CAPS states that FAL learners should have knowledge of reading vocabulary of between 2200 words at the end of the first term in Grade 6 to 5000 words at the end of the year. It also means that by the end of a year learners should have acquired 2800 new words. It is not clear whether the vocabulary expected to be gained is recognition vocabulary or productive vocabulary. Again, CAPS does not state the levels of words that the learners are expected to know nor does it provide a word list to guide the teachers.

The Southern and East African Consortium for Monitoring Education Quality (SACMEQ) (2004) reports that children in South African rural and township schools in Grades 1 to 6 read two grade levels below their own grade in English (Mudzielwana, 2014:19). One of the causative factors identified in the report is that in Foundation Phase instruction is done in the

mother tongue. CAPS states that learning in the Foundation Phase should be conducted in the mother tongue in all subjects with English slowly introduced through oral language in the form of stories and classroom instructions in Grade 1 (DBE, 2011:16). In Grade 2 oral recounts should be introduced and in Grade 3 written recounts should be introduced while at the same time learners learn to read in their home language (DBE, 2011:12). Mbatha (2012) in support of the CAPS (2011) policy with regard to the language of learning and teaching (LoLT) in the Foundation Phase states that:

“using the home language as a resource for reading is advantageous because children who learn reading skills in their home language are able to transfer the skills in learning to read another language” (Mbatha, 2012: 62)

However, the question is whether the teaching of reading that takes place in South African schools in the home language enables learners to develop reading literacy skills that can be transferred to additional language reading. Although the Department of Education recommends reading in the home language, Pretorius and Currin (2010: 68) note that it is not enforced, hence it is not effective. According to Mudzielwana (2014: 24) teaching reading in the home language is difficult for South African teachers in most schools because there is insufficient and in some cases no reading material at school and at home in the home language. Pretorius and Currin (2010: 68) also add that teachers are poorly qualified and classes are large and difficult to manage. In the Foundation Phase, teachers tend to emphasize decoding which in most cases is done superficially (Pretorius & Currin, 2010; Jordaan, 2011; Mudzielwana, 2014). Another factor that is limiting the teaching of vocabulary and reading in schools is that many teachers use inappropriate methods of teaching reading mainly because they have not been explicitly trained to do so and resort to rote learning (Mudzielwana, 2014: 24). The Department of Education (2008: 10) also states that ‘many teachers have no understanding of teaching literacy, reading and writing’. Ineffective teaching of reading because of lack of teaching expertise, coupled with limited literature on teaching reading results in learners attaining low reading levels which in turn hinders vocabulary development, especially when learners have to start reading in the additional language from Grade 4 onwards (Pretorius & Mampuru, 2007; Zimmerman & Smit, 2014).

Regarding the required vocabulary in the Foundation Phase, the CAPS document (DBE, 2011: 92) provides a word list of 300 high frequency words, the most common words that learners encounter in the story books read to them by their teachers. Story books are provided by the Department of Basic Education. Learners are expected to know these 300 words by the

end of Grade 3. Most of the words occur at the 1000 word level. However, the question still remains whether teachers are able to teach said vocabulary to the Foundation Phase learners to the extent that the words are mastered and retained for future use and as a foundation for vocabulary development in Grade 4 and higher.

The CAPS (2011) does not clearly distinguish between receptive and productive vocabulary nor does it specify the vocabulary levels crucial for speaking and in writing. It does, however, spell out that words should be learnt in context and should include synonyms, antonyms, collocates, compound words, root words, inflections and words from the same lexical field. In addition, the policy does not state whether the words are individual words or word families. Lesson plans that indicate when to teach vocabulary and how to teach it have been provided to assist teachers (CAPS 2011). Research (Pretorius & Currin, 2010; Mudzielwana, 2014) shows that the lesson plans are found wanting on methods that can lead to vocabulary development considering that the implementers of the lesson plans are inexperienced teachers who are also either unqualified, under qualified or ill-trained.

In the next section I will discuss literature about vocabulary teaching practices in South African schools.

2.14 Teachers and vocabulary teaching

It was only few decades ago that vocabulary was ‘a neglected’ aspect (Meara, 1980). Recent research indicates that vocabulary is indeed still being neglected by many teachers because teachers still spend very little time on explicit vocabulary instruction (Folse, 2010; Clouston, 2013). In South African schools, vocabulary is still being neglected in as much as reading is also neglected (Pretorius, 2000; Pretorius & Lephalala, 2011; Nozonkiza, 2014, 2016; Klapwijk & van Der Walt 2008; Pretorius & Klapwijk, 2016). Some teachers who think that they are doing justice to vocabulary teaching still use poor teaching methods (Mudzielwana, 2014: 24) and although teachers regularly spend time on vocabulary instruction with their students it is clear that not much is being done in the language classroom since most teachers are not properly trained.

In the national systemic evaluations conducted by the Department of Education in 2001, Grade 3 learners achieved a mean of 38% for reading and writing in their home language (Pretorius & Currin, 2010: 67). The findings indicate that South African learners’ reading and writing standards are below standard in their home language. The same observation was

made by Fleisch (2008) who suggests that mother tongue instruction advocated by CAPS (2011) in the Foundation Phase leaves learners with a limited English vocabulary of about 500 words by the end of Grade 3. When learners reach Grade 4 most of them can only read simple three to seven-word sentences in the present tense and they are overwhelmed by English as the LoLT (Fleisch, 2008). Pretorius (2002) comments that learners generally have barely mastered comprehension skills in the mother tongue by the end of Grade 3 and as such they struggle to transfer literacy skills to additional language reading. Pretorius and Currin (2010) observe that learners in Grade 4, 5 and 6 perform poorly in reading and writing in both national and international assessments. The 2014 ANA national results indicate that the school scored a mean of 45% in the FAL examinations. The results indicate a poor reading and vocabulary development which impacts academic achievement.

Pretorius and Klapwijk (2016: 1) study in the Western Cape Province indicate that there are low literacy levels in South Africa. The findings reinforce the PIRLS 2006, 2009 and 2011 results in which South African schools scored the lowest in reading achievement internationally. According to Pretorius and Klapwijk (2016: 1) in 2006, the Western Cape Department of Education attempted to counter the low literacy levels in the province by putting in place a Literacy and Numeracy strategy. This was followed shortly in 2008 by the Foundations for Learning Programme which was implemented countrywide by the Department of Education with the aim of improving literacy levels of Grades 1 to 6 learners. The Foundations for Learning Programme outlined how literacy should be taught (Pretorius & Klapwijk, 2016). Not long afterwards the Dutch Funded TEP Project 20 was implemented which was meant to improve literacy in schools and teacher development. Pretorius and Klapwijk (2016:5) also report on the implementation of the Early Grade Reading Assessment in 100 schools to identify early reading problems and to adapt instructional practices to grade three learners. All these frantic efforts are a clear indication that the Department of Education acknowledges the reading problems in South African schools.

Since reading and vocabulary share a nurturing relationship, it can be concluded that reading problems affect vocabulary development. Pretorius and Klapwijk (2016: 5) state the cause of reading problem as a result that Grade 1 learners having little access to books and extended pieces of texts, classrooms which are bare of print, inadequate teacher training programmes for Foundation Phase teachers and the fact that reading is a code-based activity in most classrooms. Teachers also cannot administer different types of assessment tools, cannot use

assessment data to inform their own teaching and also that there is no communication between teachers and parents so that reading done at school is extended to the home environment. They also state that comprehension in the classroom is mainly oral and that teachers cannot carry out quality discussion with learners in the classroom, which enhance vocabulary building. The biggest challenge therefore in the South African context is producing knowledgeable teachers.

To further illustrate the low literacy levels in South African schools, the International Association for the Evaluation of Educational Achievement (IEA and UNESCO (2016) report on the PIRLS (2016) results reveal that South African learners scored the lowest marks in the 2016 PIRLS and came out last in reading achievement out of the 50 countries that participated. The IEA (2017) also report that girls out-performed the boys in reading and came out number 48 out of 50 with boys coming out last in performance. Two hundred and ninety three (293) schools in South Africa were tested countrywide. The IEA (2017) findings were that reading achievement was related to home resources that support learning (books and supportive parents) digital devices, parents who like to read and students who achieved better attended affluent schools. In South Africa there was a general decrease in parental involvement which further worsens the reading achievement of South African learners. The IEA (2017) reports that South African literacy has been showing a downward trend since 1976. The implication is that in South Africa the conditions that affect reading and numeracy achievement as already highlighted need urgent solution.

Vocabulary learning should not only be confined to the explicit teaching of words by teachers only. It should also extend to teaching learners strategies of learning new words so that they can make sense of what they read during self-directed reading (Klapwijk, 2011; Zhang et al. 2015). Zhang et al. (2015: 740) define strategies as “specific actions behaviours, steps or techniques that students use to improve their own progress in developing skills in a second or foreign language”. However, Klapwijk (2011: 27) points out that most teachers in South Africa have difficulty implementing strategy instruction to their learners due to lack of professional development since most of them are not adequately trained. Most learners therefore rely solely on the teacher for learning new words. Research indicates that in addition to poverty, lack of resources, language (English as a LoLT) and large classes, teaching remains at the ‘heart’ of the reading crisis in South Africa (Fleisch 2008; Pretorius & Currin, 2010; Klapwijk, 2011; Mudzielwana, 2014).

It would seem, therefore, that the vocabulary size that is expected to be mastered by Grade 3 learners at the end of the Foundation Phase and Grade 6 as suggested by CAPS is generally not attained by the time learners complete Grade 6. In view of the factors discussed above, the aim of this study therefore is to determine the productive vocabulary size of the Grade 6 learners, specifically in township schools.

An analysis of the report compiled by the National Reading Panel (2000) which is also applicable to the South African schools indicates that not much takes place in the language classrooms regarding vocabulary teaching. The National Reading Panel (2000), report that most learners with reading problems have poor vocabulary levels. In South African schools, reading is 'a national crisis' and the National Reading Panel (2000) suggests that teachers should use various methods to teach vocabulary so as to help learners acquire the vocabulary that will help them to read to learn.

According to Mudzielwana (2014: 25) workshops for teachers that are usually unprofitable are the only source of knowledge which they are supposed to translate to learners when they get back to the classroom. In addition, Wessels and Mnkeni-Saurombe (2012), report that most teachers in a township school in which they conducted a study were not motivated to use the library, a phenomenon which has consequences on their vocabulary development. Similar findings indicating the teachers' poor vocabulary levels have also been reported (Pretorius, 2005; Vander Walt and Klapwijk, 2008; Nizonkiza & Van Den Berg, 2014). If teachers' vocabulary is small it follows that they are not proficient in English and therefore cannot teach effectively. Moreover, regarding the development of productive vocabulary, CAPS seems to emphasize the use of dictionaries to learn word meanings – a method which promotes receptive vocabulary rather than the development of productive vocabulary (Bintz, 2011). This neglect has implications on the development of vocabulary for writing and for speaking as well as for achievement in reading (Bromley, 2007: 525). Monareng (2005) and Mudzielwana (2014) conclude that teachers need practical help so that they do not pay lip service to vocabulary teaching.

It is clear from the reviewed literature that several studies have focused on productive vocabulary development, both nationally (Kruizinga & Nathanson, 2010; Pretorius & Lephala, 2011; Mudzielwana, 2014; Nizonkiza & Van den Berg, 2014; Scheepers, 2014; Nizonkiza, 2016) and internationally (Nagy et al., 1985; Laufer & Nation, 1995; Schmitt et al., 2001; Zareva, 2005; Webb, 2008; Willingham & Price, 2009; Zhou, 2010). Very little

seems to have been done about investigating the productive vocabulary levels in township schools. Since productive vocabulary plays such an important part in literacy development, and because knowledge of learners' vocabulary levels may serve to inform schools, teachers and curriculum developers, this study endeavours to determine the vocabulary size of Grade 6 township school learners and teachers.

To conclude this section, the reviewed literature reveals that vocabulary knowledge in general is of paramount importance in language learning and for academic success. Productive vocabulary which is the focus of this study forms part of the foundation of vocabulary development and the ultimate goal of vocabulary learning should be to transform receptive vocabulary into productive vocabulary in order to enhance literacy development and academic success

2.15 Conclusion

This chapter discussed the definition of the term vocabulary, the theoretical issues related to productive vocabulary acquisition, the relationship between vocabulary breadth and depth, the distinction between receptive and productive vocabulary and the factors that influence variations in vocabulary size among different learners. Furthermore, issues relating to the relationship between receptive and productive vocabulary, as well as the productive vocabulary threshold were presented. The review of literature also highlighted what is involved in knowing a word, the importance of knowing words productively, the relationship between productive vocabulary and reading, reading comprehension, writing and as well as the relationship between vocabulary and speaking. Also discussed were issues on how much vocabulary should be taught in a single session as well as CAPS and the development of vocabulary and the implementation of the policy in schools.

The next chapter describes the research methodology issues of this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

According to McMillan and Schumacher (2010) every research study follows a particular procedure that enables the researcher to collect, present and analyse data for a study. This chapter will describe the research method, the approach and the design used in this study. Secondly, ethical considerations will be discussed. Thirdly, a detailed description of the pilot study will be presented as well as the results of the pilot. Changes that were made to the instruments after the pilot study will be highlighted. Finally, the main study will be described.

3.1 Purpose of the study

The purpose of this study is to establish the productive vocabulary size of grade 6 learners and their teachers in 16 schools from a township in a Johannesburg district of the Gauteng Province. The low provincial average percentage marks in First Additional Language (FAL) which (for the past 3 years) have been close to 45% in Gauteng and the district average of 50.4% in the 2014 ANA are a cause for concern (Annual National Assessment report, 2014). According to the ANA report, only 42 % of the learners nationally achieved 50% and better in the grade 6 First Additional Language (FAL) (ANA report 2014). Milton and Treffers-Daller (2013) contend that there is a strong relationship between vocabulary, language proficiency and academic achievement. Furthermore, the Southern and Eastern Africa Consortium for Monitoring Education Evaluation Quality (SAQMEQ, 2002, 2007) reports that 27% of grade 6 learners from disadvantaged areas are illiterate and cannot read simple sentences in English and in the mother tongue and that teachers have below-basic levels of content knowledge in mathematics. This study therefore endeavours to test both learners and teachers using a widely acknowledged and research-proven vocabulary test, namely the Productive Vocabulary Levels Test (PVLТ) created by Laufer and Nation (1999).

Studies also reveal that most teachers in South Africa have limited proficiency in English as observed by Nel and Muller (2012). According to the former minister of education Naledi Pandor (2012, in Jordaan 2013) most of them are not sufficiently trained to teach in English. Additionally, Meara and Alcoy (2010) hold the view that there is a relationship between

vocabulary size and proficiency in a language. Therefore, I wanted to establish the vocabulary size of the teachers against the above assertions.

3.2 Research Method

The study used a mixed methods approach in which both quantitative and qualitative data were collected. McMillan and Schumacher (2010) contend that the mixed method approach provides a more complete investigation of the identified problem. Similarly Dornyei (2007) and Bronstein and Kovacs (2013) describe mixed methods research as methodological triangulation, mixed research or integrated methods and point out that methods used in combination help to complement each other. This study is based on a pragmatic paradigm which is inclined to solving human problems by collecting data from various sources and triangulating them to obtain more reliable results (Bronstein & Kovacs 2013). Quantitative and qualitative data were thus collected and used to test the hypothesis (see § 3.2.3) and to answer the research questions (see § 3.2.4). The quantitative and qualitative data were collected in different phases of the research with quantitative data collected in the first phase of the research and qualitative data in the second phase. Results were merged at the interpretation stage.

3.2.1 Approach

The study used an analytic approach to investigate the problem. According to Seliger and Shohamy (1989) the analytic approach as opposed to the synthetic-holistic approach allows the researcher to try and understand the phenomena under investigation by looking at separate parts that make up a whole. The study is also both heuristic and deductive in its purpose by virtue of it being mixed method research.

3.2.2 Research design

All research needs a design or a plan. According to Gay (1999: 75) a research plan is a detailed description of a proposed study designed to investigate a problem. It also includes giving a detailed presentation of the steps to be followed in collecting and analysing data and a projected time for each major step. Similarly McMillan and Schumacher (2010:219) hold the view that research design describes the procedure for conducting the study including when, from whom, and under what conditions the data will be obtained. The present study used a non- experimental descriptive design to investigate the vocabulary levels of ESL

learners and teachers in schools in a Johannesburg District township. Both descriptive and inferential statistics were used to analyse the results.

3.2.3 Hypotheses

The study was driven by two hypotheses. The first hypothesis pertains to learners and it states:

1 The majority of learners in the participating schools have a small productive vocabulary which is below the level required for academic success at their grade level.

The second hypothesis pertains to teachers and it states:

2 Most teachers in the participating schools have a small productive vocabulary which impacts on their teaching.

Gay (1999: 54) states that the researcher has to verify or refute the hypothesis through carefully planned and meticulously executed investigations. To support the hypotheses four research questions were formulated as outlined in 3.2.4.

3.2.4 Research questions

The study endeavoured to answer the following research questions;

1. What is the productive vocabulary size of the Grade 6 township schools learners as measured by the Productive Vocabulary Level Test?
2. What is the productive vocabulary size of the teachers in township schools as measured by the Productive Vocabulary Level Test?
3. What kind of vocabulary instruction takes place in the participating Grade 6 township schools?
4. What percentage of words at the different VLT levels do learners use in their writing?

Research questions 1 and 4 serve to verify or refute the first hypothesis. Through the use of the PVLVT administered to the learners, their vocabulary size will be established and their scores used to determine whether their productive vocabulary is adequate for their grade level or not.

Research questions 2 and 3 serve to verify or refute the second hypothesis. The PVLТ will also be administered to teachers to determine their vocabulary size.

3.2.5 Procedure

Measuring the vocabulary levels of ESL learners and teachers entails carrying out a series of procedures that help to answer the four research questions and to test the stated hypotheses. This section briefly describes the procedure followed. To answer research questions 1 and 2 about the vocabulary sizes of learners and teachers, I administered a Productive Vocabulary Levels Test version C for learners (see Appendix A) and version A for teachers (see Appendix B). Version C comprises four levels with 18 questions in each level. The levels include the 2000, 3000, 5000 and the 10000 frequency levels. Version A comprises five levels namely the 2000, 3000, 5000, University Word List (UWL) and the 10000 frequency levels, each with 18 questions. Both tests can be written in 40 minutes.

Qualitative data were obtained by conducting semi-structured interviews with at least one teacher from each of the schools that participated in the PVLТs. In addition, two learner FAL exercise books from each school were examined for evidence of vocabulary teaching and teaching methods employed. Extracts from learners' writing were analysed using the VocabProfiler software designed by Laufer and Nation (1995) to establish the levels of the words used in the learners' writing. Data from all the above mentioned sources were triangulated. The qualitative data served to assist in answering research questions 3 and 4 and both the qualitative and the quantitative data were used to prove or to refute the hypothesis. Descriptive statistics were used to analyse quantitative data. To draw conclusions from the descriptive statistics the researcher used inferential statistics in which a t-test and ANOVA were computed.

3.3 Ethical considerations

All research must be conducted in an ethical manner. The study was guided by five ethical considerations. Firstly, before conducting the pilot study, an ethical clearance letter from UNISA (Appendix C) granting permission to conduct a study in the identified district was obtained. Secondly, an approval letter (Appendix D) was obtained from the Gauteng Department of Education to conduct research in the selected schools. Thirdly, it is the responsibility of the researcher to ensure the dignity and the welfare of the participants and to protect them from harm, unnecessary risks, mental and physical discomfort. Therefore, the

anonymity of all learners and teachers who participated in the study was ensured by using pseudonyms or by not writing names on the answer script, and that data collected were only used for purpose of the study.

I also ensured that the data collected were stored safely and securely during the study. Fourthly, the participants were not coerced into taking part in the study. Teachers signed consent forms (Appendix E) to show that they voluntarily participated in the study. Parents of participating learners also signed consent forms allowing their children to take part in the study (Appendix F, G and H). The letters were written in Zulu, Northern Sotho and South Sotho with an accompanying version in English. Additionally, grade 6 learners are considered minors and therefore signed assent forms (Appendix I) indicating that they agreed to take part in the study. A letter to the principals seeking permission to conduct research in their schools was also issued to the selected schools (Appendix J). Finally, I explained to the participants that they were free to withdraw from the study at any stage of the research if they so wished. After obtaining and distributing said documents, I proceeded to collect data for the pilot study and thereafter data for the main study (see § 3.11).

3.4 Pilot study

A pilot study is a small-scale study that precedes but resembles the main study (Gay, 1999: 90). According to Teijlingen and Hundley (2001) its main aim is to test the instruments that will be used for data collection in the main study. The participants of the pilot study were identical in all respects to the participants of the main study. Piloting the instruments that were used for collecting data in a small population sample was conducted so as to ensure the suitability of the instruments, so that adjustments and amendments could be made before using the instruments in the main study. The participants that were used in the pilot study did not take part in the main study. The researcher selected one school in the Johannesburg South District for the purpose of piloting the instruments.

3.4.1 The school context

The school that was selected for the pilot study is an independent school which like the neighbouring public schools is a non-fee paying school. Financially the school relies on a government subsidy which is based on their performance in the ANA tests. The school is under the administration of a privately-funded organisation whose headquarters are in India and whose mission is to provide free education to poor communities.

The teaching staff comprised black male and female teachers from South Africa, Zimbabwe and Lesotho. At the time of the pilot study, there was a staff compliment of 45 teachers and the school enrolment stood at 1524 learners. The school uses English as the language of Learning and Teaching (LoLT) although it is in the heart of a non-English speaking community. Zulu and Sotho are taught as Home Language (HL) from Grades 1-7. The teaching of local languages at grades 1-3 at the school was made compulsory in 2012 following the Department of Education policy that all schools were to teach indigenous languages from grade 1. Before 2012 the medium of instruction was English from Grades 1 to 7. This attracted learners from the neighbouring public schools as parents claimed that teachers at the public schools used mother tongue instruction in the classrooms resulting in their children being unable to communicate in English which they perceive to be an important language. Most children from the pilot school can conduct basic communication in English, because the LoLT is English and many teachers are foreign nationals who cannot speak the local languages. From Grades 4 to 7 English is taught by the foreign teachers. In Grades 6 and 7 English, Maths and Natural Science subjects are taught by foreign nationals. In the year of the pilot study the school's total enrolment had increased with all grades registering six classes with an average of 45 learners per class, except Grades 6 and 7 with four classes and an enrolment of 140 learners in Grade 6 and 155 learners in Grade 7.

The school does not have textbooks for each learner save for a few textbooks for teachers. There is no library at the school. Teachers therefore have to be resourceful in order to provide learners with reading material. In addition, the school does not receive an allocation of workbooks from the Department of Basic Education. However, teachers are regularly invited to attend workshops that are organised by the Department of Basic Education but they are not given any materials such as the ANA booklet, charts and lesson plans which public schools are given. At this school the grade 6 learners are the only class that write the ANA tests, a requirement by the Department of Basic Education that in independent schools, the highest grade in the Intermediate Phase (Grade 6) must write the ANA examinations. Despite the lack of assistance from the Department of Basic Education and still being expected to participate in the ANAs, this school continues to perform better than the neighbouring public schools.

3.4.2 Participants

Carrying out an empirical investigation requires gathering data from someone or something generally termed units of study, participants or subjects (McMillan and Schumacher, 2010:128). The participants in the present study comprised grade 6 learners and any teachers who agreed to participate in the study. Participating learners totalled (n=66) and teachers totalled (n=10). Of the 66 learners who participated, 33 were boys and 33 were girls. The learners were aged between 11 and 12 and speak both Zulu and Sotho fluently.

Ten teachers agreed to take part in the pilot study. Two of them taught English to the two Grade 6 classes that participated in the pilot study. The other eight teachers taught different subjects in grades four to seven. The teachers were tested with the PVLТ version A. The ten teachers were tested in one of the classrooms at the school at the end of the school day and I invigilated them. I explained to them about the consent forms which they signed before the test. Thereafter, I explained how to answer the test and encouraged them to attempt all the questions. They wrote the test in 40 minutes.

3.4.3 Sampling procedure

The population sample of the pilot school was representative of learners and teachers in the township schools of the selected district based on its large enrolment which stands at 1400 learners and 45 teachers. The school has four Grade 6 classes with an average of 33 learners per class. The sample was purposefully selected so as not to upset learner and teacher routines. Grade 6 learners were selected for the pilot study because the main study focuses on Grade 6 learners. The grade 6 learners were selected for this study because they were the highest group writing the ANA tests for the independent school.

3.4.4. Instruments

Conducting research requires the use of appropriate tools called instruments (Gay, 1999: 85) that are used to collect data. The present study made use of several instruments as outlined in the subsequent sections.

3.4.4.1 Productive Vocabulary Levels Test of Controlled Ability (PVLТ)

The Controlled Productive Vocabulary Levels Tests (PVLТ) was administered to both learners and teachers in the pilot study. Learners were administered Version C (see Appendix

A) and teachers were administered Version A (see Appendix B). The reason for administering different versions was to ensure that teachers did not feel they were being compared with learners. Both versions of the test have high validity and reliability scores (Meara & Alcoy 2010). Pallant (2007) states that a validity of .7 Cronbach's alpha is an ideal level of validity while .8 is considered to be very good. Version C of the PVLТ has a Cronbach's alpha of .91 while version A has an alpha of .86 (Laufer & Nation 1999: 42).

The tests are easy to administer, easy to mark and easy to interpret (Meara, 2005). Additionally, scoring is easy since each correct answer equals 1 mark. The tests are also known for their reliability and accuracy in measuring a learners' vocabulary size. Many ESL researchers have used the PVLТs to determine the vocabulary sizes of their participants in various settings and have produced results that are consistent with the situations of their participants (Nation & Waring, 1997; Alonso & Garcia, 2014). In addition, the PVLТs like the VLTs that are used for measuring receptive vocabulary are standardised tests (Nizonkiza & Van Den Berg, 2014).

The PVLТ is made up of sections called frequency levels. According to Pignot-Shahov (2012) the PVLТ was made by ranking all the word families or lemmas of English written texts into a list from the most frequently used word to the least frequently used word and then dividing the words into levels of 1000 words per level. The first level, namely the 1000 level, contains all function words and the most frequent content word families (Nation, 2001). However, I did not test both the learners and teachers the first level because words at this level can be learned with ease and learners do not need explicit instruction to master them. The second level, also called the 2000 frequency level contains the second 1000 most frequently used word families. The division into 1000 word levels continues up to the least frequently used words. The higher the frequency level the lower the frequency of use of the word families (Nation, 2001). The University Word List (UWL) contains the 570 most frequently used word families in academic writing. Version A has 5 levels namely the 2000, 3000, 5000, UWL and 10000 levels. Version C contains the 2000, 3000, 5000 and 10000 levels. The 18 words that are tested in each level are representative of the words in each level (Nation 2001; Pignot-shahov 2012).

The test items consist of sentences with an incomplete target word which the test taker is required to supply. For an example;

The la ___ of rain led to the shortage of water in the city (Laufer & Nation, 1999).

The first few letters of the target word are provided to ensure test taker does not supply another word that is semantically correct but occurs at frequency level higher or lower than the level being tested. The expected answer is;

The lack of rain led to the shortage of water in the city.

The test is a type of sentence cloze test and the words are presented in a single context. In scoring the test, each correct answer scores 1 mark. Spelling errors and incorrect tenses were not penalised. This instrument provided the quantitative data for this study, which constituted the greater part of the research.

3.4.4.2 Learners' FAL exercise books

The qualitative data for the pilot study were obtained from two FAL written exercise books from learners who took part in the pilot study. The books were examined for evidence of vocabulary teaching and the level of vocabulary used by learners in their written work. Learners' written work was analysed using a VocabProfiler (VP), an on-line software program created by Laufer and Nation (1995), to establish the vocabulary type used in the learners' writing. The online software is used to measure lexical richness of a text by profiling the words used by the writer into frequency levels.

Vocabulary from the following types of written work from learners' exercise books were all put into one text file: vocabulary from comprehension texts, spelling tests, words used to teach phonics (as these words became part of the vocabulary taught), learners' own productive work such as sentence construction exercises, compositions, letters and diaries. The results of the VocabProfiler were compared with the PVLТ results. Results obtained were also compared with the ideal native frequency of use of 70-10-10-10 that was found from native speakers (Nation, 2001), (see Table 1).

Results from the VocaProfiler are displayed in three ways. Firstly, a frequency summary showing what percentage of the input text lies in each vocabulary frequency level is presented. Secondly, the text is presented with each word colour coded for frequency and lastly, lists of all the words in each frequency level are given. According to Laufer and Nation (1995) The VP tool is excellent for obtaining an overview of a frequency profile of a text and

highlighting low frequency vocabulary that may be a problem for learners of low proficiency in the L2. The rationale for using the Vocabprofiler lies in the fact that the VP score is reliable across two texts by the same learner provided the genre is the same (Laufer & Nation, 1995). The VP scores also correlate with an independent measure of vocabulary knowledge particularly Laufer and Nation's (1999) levels tests. Lastly the VP scores predict broader language proficiency measures. This means that learners at three proficiency levels have significantly different VP scores (Laufer & Nation 1995). According to Laufer and Nation (1995) a native speaker's frequency profile is 70- 10-10-10 (refer Table 3.1).

Table 3.1: The frequency profile of a native speakers' vocabulary

Frequency bands	Percentage Profile
1-1000	70%
1001-2000	10%
AWL	10%
Off List words	10%

Table 3.1 shows the ideal vocabulary profile of a text produced by a native speaker regardless of the length of a text. A text with weak vocabulary would indicate a higher percentage of 1-1000 words and much lower percentages of vocabulary in the higher frequency levels, namely the 1001-2000, the Academic Word List (AWL) and other words that do not appear in the first two levels but are used more frequently. The percentage would be much lower than the 10 % indicated in the last three levels. Such a text is said to lack in linguistic ability or in lexical richness.

3.4.4.3 Classroom observations

The intention was to conduct classroom observations at the pilot school in order to find out how vocabulary was taught and which words were taught explicitly to learners (if at all). Two teachers volunteered to be observed teaching a comprehension lesson. An observation sheet was designed to record data from classroom observation (see Appendix K). However, because of the time constraints this instrument was excluded from the pilot study, but was used in the main study as a valuable source of qualitative data.

3.4.4.4 Interviews

A semi-structured interview was used to collect qualitative data from two teachers at the pilot school (Appendix L). An interview schedule of 20 questions pertaining to vocabulary teaching and learning was prepared. The questions were divided into three sections with the following subheadings; 1 CAPS and vocabulary teaching, 2 How words are selected for teaching and 3 Methods used for teaching vocabulary. However, because of time constraints, an informal interview with both teachers which covered the essential aspects of the research was conducted. In other words, the 20 questions in Appendix L were not used as stated; rather a more general discussion took place. However, data were captured from the teachers' responses and summarised.

3.5 Validity

According to Hughes (2003:50) a valid test should measure consistently what it intends to measure. Beglar and Hunt (1999) revised the Controlled Productive Vocabulary Levels Test (PVLТ) 2000 word level and UWL level of versions A to D and explored their validity and found that the tests measured a single construct and that items strongly related to one another. Laufer and Nation (1995) agree that the PVLТs have sufficient face validity for the intended ESL learners, in this case, the township school learners who have low English proficiency. Nizonkiza and Van Den Berg (2014: 52) contend that the test allows for profiling learners' vocabulary size using frequency levels and that it can be used to compare groups accurately as well as compare different frequency levels accurately (Nation & Waring, 1997). Alonso and Garcia (2014) based on their study of the Spanish EFL learners attest to the fact that the tests have high validity levels and are highly reliable. Laufer and Nation (1999: 37) also contend that the tests are valid and can distinguish between learners of different proficiencies.

3.6 Reliability

A research instrument that is used to test any variable should be reliable. Hughes (2003: 50) defines a reliable test as a test that produces stable and consistent results. Pallant (2007) cites different aspects of reliability, one of which is internal consistency which refers to the degree to which the items of the scale 'hang together'. In this study, the PVLТ measured the vocabulary knowledge and comprehension of both learners and teachers. Pallant (2007: 27) contends that the indicator of internal consistency should produce a result with a Cronbach's alpha of .7 or higher, a good indicator of a reliable test. Pallant (2007) further states that a

reliability of 0.8 Cronbach's alpha indicates high reliability levels. The PVLТ used in the study was tested for reliability by Laufer and Nation (1999: 42) who found that Version A had a reliability of 0.86 using the Kuder-Richardson formula KR21, indicating very high reliability levels. Version C had a reliability score of 0.91. The test items measure the same underlying constructs. To further strengthen the reliability of the study's scores, the learners' and teachers' PVLТ scripts were marked for a second time three months after the first marking. Errors that were made during the first marking were corrected during the second marking (Laufer & Nation 1999).

The next section discusses the results of the pilot study.

3.7 Results of the Pilot study

This section presents the results of the pilot study. The results are presented in the order they were collected. The result for the PVLТ for learners and teachers are presented using tables and graphs where applicable. Then, results from learners' written work will be presented and finally, the results from the interviews and lesson observation will be presented.

3.7.1 Learners' PVLТ results

The Statistical Packages for Social Sciences (SPSS) Version 23 was used to compute data collected for the PVLТs. Table 3.2 shows the descriptive statistics in raw marks for the learners' PVLТ scores for the four levels of the PVLТ version C.

Table 3.2: Learner PVLТ descriptive statistics in raw scores (Learner pilot)

Levels	N	Minimum	Maximum	Mean	Std deviation
2000	66	.00	16.00	8.76	4.17
3000	66	.00	15.00	5.71	3.60
5000	66	.00	11.00	2.71	2.51
10000	66	.00	6.00	1.10	1.22

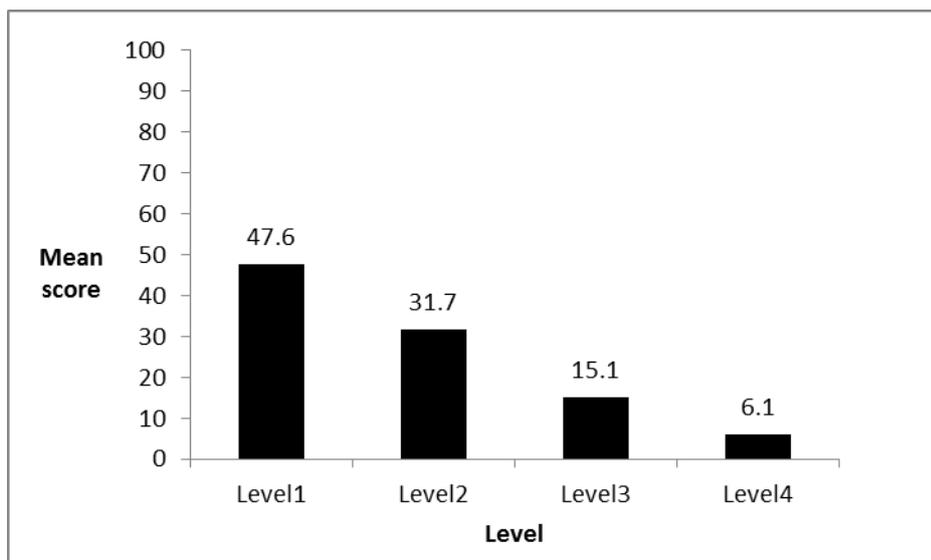
The total possible score for each level is 18. In all the levels the minimum score recorded was zero (0) an indication of poor vocabulary among learners. The maximum score of 16 recorded for the 2000 word level is a fairly good score but the mean ($M= 8.76$) for the whole pilot group at that level indicates that many learners modal score was below 9 (half), a poor average performance by the learners who took the test. The standard deviation ($SD=4.17$) indicates a wide spread of scores around the mean as seen from the minimum and the

maximum scores recorded. However, at the 10000 word level, the standard deviation (SD=1.2) indicates that all learners who took the test obtained scores very close to the mean (M=1.10) an indication that learners in the pilot group have poor knowledge of vocabulary at this level. Results indicate that the means decrease as the levels increase. Table 3.3 shows the same scores expressed in percentages.

Table 3.3: Learner PVLТ descriptive statistics in percentages (Learner pilot)

Level	N	Minimum %	Maximum %	Mean %	Std deviation
2000	66	.00	88.89	47.64	23.17
3000	66	.00	83.33	31.73	19.97
5000	66	.00	61.11	15.07	13.94
10000	66	.00	33.33	6.14	6.76

According to Nation (2001) a learner who knows 90% of the words at each level will be able to understand over 80% of any text read. Such a learner is able to infer the meanings of the few unknown words resulting in total comprehension of texts read. However, the above results indicate a low vocabulary size at all levels in the pilot learners. Although the maximum scores for the 2000 frequency level and the 3000 frequency level could be considered high, (88.9% and 83.3%) Nation (2001) explains that these scores fall below the minimum that gives learners sufficient word knowledge to comprehend a text adequately.



Key: Level 1-2000; Level 2- 3000; Level 3- 5000; Level 4- 10000 word Levels.

Figure 3.1: Distribution of Mean Scores by Level for Pilot Learners in % (n = 66)

From Figure 3.1 it can be concluded that learners have low levels of vocabulary as indicated by the means of M=47,6% for the 2000 word level, M=31,7% for the 3000 word level, M=15,1% for the 5000 word level and M=6,1% for the 10 000 word level.

In Table 3.4, in addition to the mean scores, minimum, maximum and standard deviation, the scores of learners in the 25th, 50th and 75th percentiles are displayed in an effort to show how individual learners compared with the pilot group as a whole. The median has also been included since it is a score that coincides with the 50th percentile.

Table 3.4: Percentiles indicating learner performance

Learners n=66	2000 level in %	3000 level in %	5000 level in %	10000 level in %
Mean	47.6	31.7	15.1	6.1
Median	52.8	33.3	11.1	5.6
Mode	55.6	33.3	.000	5.5
Max-Min	88.9 - 0.00	83.3 – 0.00	61.1 – 0.00	33.3 – 0.00
Percentiles: 25th	27.8	11.1	5.6	0.00
: 50th	52.8	33.3	11.1	5.6
: 75th	66.6	44.4	22.2	5.5

The score of 27.8% at the 25th percentile indicates poor vocabulary knowledge of the 2000 word level by a quarter of the learners. Learners at the 75th percentile (66.6%) show that they also have not mastered the 2000 word band sufficiently. The 50th percentile, which coincides with the modal scores obtained by most learners (52.8%), is also a low score which indicates general poor performance.

3.7.2 Known vs. unknown words

According to Nation and Waring (1997) vocabulary knowledge of at least 90% of words at each level in the PVLT is indicative of a large vocabulary size. They argue that a learner may not know all the words in each level. However, if 900 words are known and 100 words are not known in a given level, the learner is said to possess a good vocabulary size. More than 100 unknown words at each level is an indication of a poor vocabulary size.

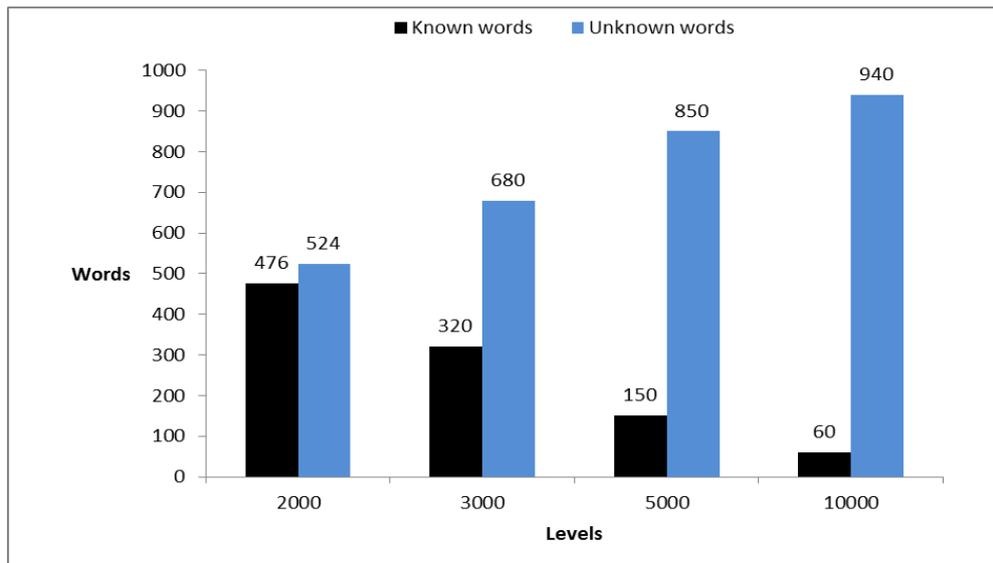


Figure 3.2: Distribution of known and Unknown words by learners (pilot n=66)

Figure 3.2 shows that learners in the pilot study know an average of 476 words at the 2000 word level but are unfamiliar with 524 words at that level. In other words, the number of unknown words is greater than the number of known words at the 2000 word level. According to Schmitt, Schmitt and Clapham (2001) the 2000 level is the most crucial level since it affords ESL learners basic vocabulary to conduct daily basic communication. Cummins (1984) refers to the day-to-day language of communication as Basic Interpersonal Communication Skills (BICS) and contends that it allows ESL learners to interact socially with other people. Similarly, if 680 words are not known in the 3000 word level, it means that learners will struggle to read and comprehend authentic texts. It is evident from the figure that the number of words known by learners is smaller than the number of words that are unknown. Nation (2001) further states that knowledge of words at the higher frequency levels (3000, 5000) is also important for increased comprehension of difficult texts.

To determine the differences, if any, between boys' and girls' scores for the pilot study, the boys' and girls' means, maximum and minimum scores as well as the standard deviations in all four the levels were compared.

Table 3.5: Descriptive statistics for boys and girls for each level (n=66 leaner pilot)

Levels	Gender	N	Mean in %	Std. dev.	Std. error mean
2000	Boy	33	44.1	25.0	4.3
	Girl	33	51.2	21.0	3.6
3000	Boy	33	25.8	21.0	3.7
	Girl	33	37.7	17.2	3.0
5000	boy	33	12.0	11.7	2.0
	Girl	33	18.2	15.4	2.7
10000	Boy	33	4.4	6.2	1.1
	Girl	33	7.9	6.9	1.2
TotVocabulary	Boy	33	21.5	13.8	2.4
	Girl	33	28.7	13.8	2.4

The data indicate that at all the levels girls' means are higher than the means obtained by the boys. This suggests that boys' vocabulary level is smaller than the vocabulary size of the girls. At the 2000 word level boys have a mean of M=44.1% while girls have a mean of M=51.2%. The total vocabulary for girls is also higher than the total vocabulary for the boys at M=28.7% and M=21.5% respectively. The standard deviation at all levels with the exception of the 10000 word level indicate that both boys' and girls' scores are spread out from the mean in nearly the same way although girls' scores tend to cluster more around the mean than the boys' scores in the 2000 and the 3000 word levels.

3.7.3 Teachers' PVLТ results

Teachers' means, maximum and minimum scores, range and standard deviations for the 2000, 3000, 5000, UWL and the 10000 levels of version A were also computed.

Table 3.6: Descriptive statistics of teacher scores in raw marks (N=10 teacher pilot)

Level	N	Range	Min	Max	Mean	Std. dev.
2000-	10	4.00	14.00	18.00	16.00	1.24
3000	10	13.00	4.00	17.00	9.70	4.14
5000	10	8.00	5.00	13.00	8.70	2.71
UWL	10	6.00	5.00	11.00	7.10	1.95
10000	10	6.00	3.00	9.00	5.50	1.84

The teachers' results show a high mean of 16 at the 2000 word level, an indication that teachers have a high level of vocabulary knowledge at that level. The standard deviation

($SD=1.24$) indicates that their scores were clustered around the mean (16) indicating that all 10 pilot teachers have nearly the same vocabulary size at the 2000 word level. The means of ($M=7.10$) and ($M=5.50$) at the UWL and the 10000 word levels and the standard deviations of ($SD=1.95$) and ($SD=1.84$) respectively, indicate that teachers generally also have nearly the same vocabulary sizes at these levels. The 3000 word level ($SD=4.14$) shows that there are large differences in their vocabulary size for that level.

Although a mean of ($M=16$) at the 2000 level seems like a high figure, Nation and Waring (1997) state that this figure allows basic communication but is not sufficient for all levels of teachers functions. As teachers, their vocabulary size at the 2000 word level should be bigger to allow them to go beyond basic communication (BICS) to fluent/proficient communication and also to enable them to competently teach learners words at this level. A drop in scores at the 3000 level shows that teachers may struggle to read and/or teach academic texts efficiently. The scores get even lower with the increase in levels with a mean of (7.10) for the UWL - an indication that the pilot teachers have limited knowledge of low frequency and technical vocabulary required for comprehension of academic texts. Cummins (1984) and Baker (2006) contend that Cognitive Academic Language Proficiency (CALP) is essential in decontextualized academic situations as it is content-reduced unlike BICS which is content embedded. According to Nation (2001) low frequency and technical words generally make up 50% of running words of an academic text and most of these words are rarely encountered in spoken language. In Table 3.7 the same results are expressed as a percentage.

Table 3.7: Teachers descriptive statistics as a percentage (n=10 Teacher pilot)

Level	N	Range	Min	Max	Mean	Std. dev.
2000	10	22.2	77.78	100.00	88.9	6.9
3000	10	72.2	22.22	94.44	53.9	23.00
5000	10	44.4	27.78	72.22	48.3	15.1
UWL	10	33.3	27.78	61.11	39.4	10.3
10000	10	33.3	16.67	50.00	30.5	10.2

At the 2000 level, teachers' mean score was 88.9% ($M=88.9$), a figure that is slightly below the 90% knowledge of words that Nation and Waring (1997) recommend at the 2000 word level as sufficient for basic communication and comprehension. At the 3000 and 5000 frequency levels, teachers' known vocabulary is also small which would make

comprehension of challenging texts difficult. At the UWL level, a mean of 39.4% (M=39.4) is insufficient for handling academic texts.

It was also of interest to find out how teachers at the 25th, 50th and 75th percentiles performed in the test. To obtain this information, scores at the 25th, 50th and 75th percentiles were computed and presented. In addition, the mode and the median were computed to find the most frequent score and also what the middle scores of each level were.

Table 3.8: Percentiles indicating Teacher performance (n=10)

Teacher n=10	2000	3000	5000	UWL	10000
Mean	88.9	53.9	48.3	39.4	30.6
Median	88.9	50.0	44.4	38.9	27.8
Mode	83.3	50.0	38.9	38.9	27.8
Max - Min	100. – 77.8	94.4 – 22.2	72.2 – 27.8	61.1 - 27.8	50.00 – 16.7
Percentile : 25th	83.3	40.2	30.9	32.0	22.2
: 50th	88.9	50.0	44.4	38.9	27.8
: 75th	94.4	68.6	63.8	45.8	36.1

The score at the 25th percentile for teachers (83.3%) at the 2000 word level indicates adequate mastery of vocabulary. The 50th percentile score which also coincides with the median (88.9%) is an indicator of a good performance at the 2000 level. At the 75th percentile, 94.4% shows that nearly all teachers have mastery of the 2000 word level. At the 3000, 5000 and 10000 word levels, scores at the 25th percentile were 40.2%, 30.9% and 22.2% respectively. Scores decrease with the increase in levels, a trend which appears at all the three percentiles and indicates that teachers have not yet mastered the vocabulary at these levels. Of particular interest is the UWL vocabulary in all three percentiles. A score of 45.8% at the 75th percentile is rather worrying while 32.0% at the 25th percentile is also a cause for concern since vocabulary at this level is crucial for academic success.

In order to find out if the teachers' vocabulary knowledge could have an influence on their teaching, the means of learners and teachers were also compared so as to clearly see how the two groups matched.

Table 3.9: Comparing learner and teacher means by levels in percentages (pilot)

Level	Teacher Mean (%)	Learner Mean (%)
2000	88.9	47.6
3000	53.9	31.7
5000	48.3	15.1
UWL	39.4	-
10000	30.5	6.1

Table 3.9 shows teachers scored higher than learners at all levels. At the 2000 level, the mean for teachers' was nearly twice the learner mean (M=88.9% and M=47.6 % respectively). At the 5000 level, the learner mean (M=15.1) was almost three times lower than teacher mean (M=48.3%) and at the 10000 level, the learner mean was five times lower than the teacher mean (M=6.1% and M=30.56% respectively). The learners were not tested at the UWL, hence there is no score to compare with their teachers. Although differences between the teachers and learners are expected, the differences shown in this particular instance in particular at the 2000 and 3000 word levels are rather disturbing because the gap between their vocabulary sizes is quite large. If the teachers' UWL word knowledge is as low as revealed by the low means in the 25th, 50th and 75th percentiles, it is probable that they are not capable of teaching effectively in English which could at least partly account for learners' vocabulary size being small.

In Figure 3.3, words that are known and unknown by teachers at each level tested are presented.

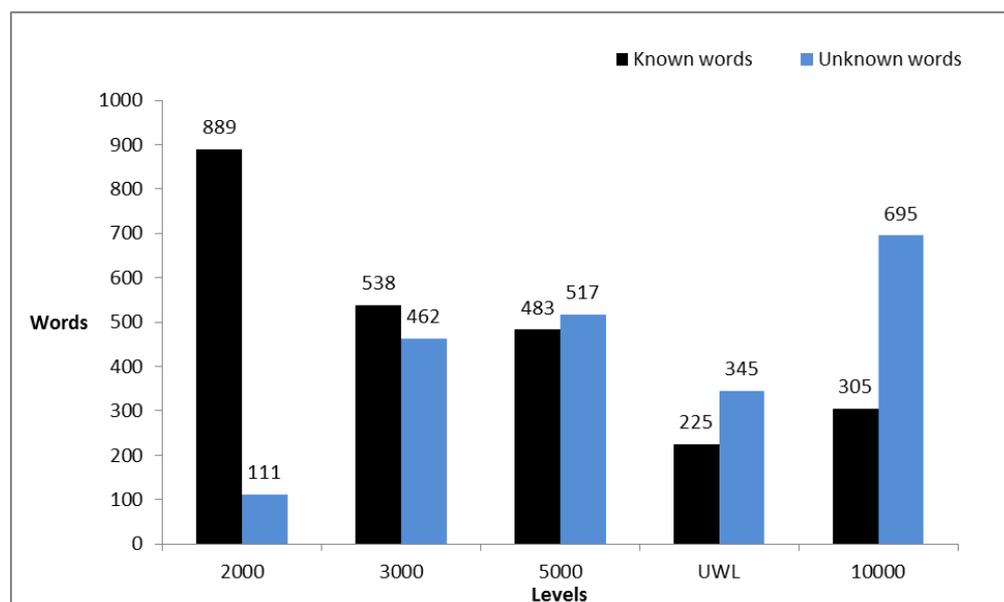


Figure 3.3: Teacher known and unknown words (Pilot n-10)

Figure 3.3 shows the number of known and unknown words for teachers at each level. Each level has 1000 words. If the 2000 word level has 1000 words and the teacher scored 88.9% at that level it means the number of words known is 889. It follows therefore that at the 2000 word level the unknown words are (1000-889) 111 words. According to Nation (2001) if 100 words are unknown at the 2000 word level, the teacher can still conduct basic communication quite well as all the words may not be necessary. However if the number of words known exceeds 100 words, then basic communication becomes a problem. It means therefore that at the 2000 word level the vocabulary size for the pilot teachers is close to what is recommended by Nation (2001).

The second level, the 3000 word level indicates that 538 words are known and 462 words are unknown. The UWL level in which 345 words are not known, together with the unknown words at the 3000 word level, is a cause for concern considering that knowledge of these two word levels is required to manage and comprehend academic texts. At the 10000 word level only 305 words are known and 695 words are unknown.

I also compared teachers and learners scores for known words at all levels of the PVLТ to determine the state of their vocabulary levels. The results are displayed graphically in Figure 3.4.

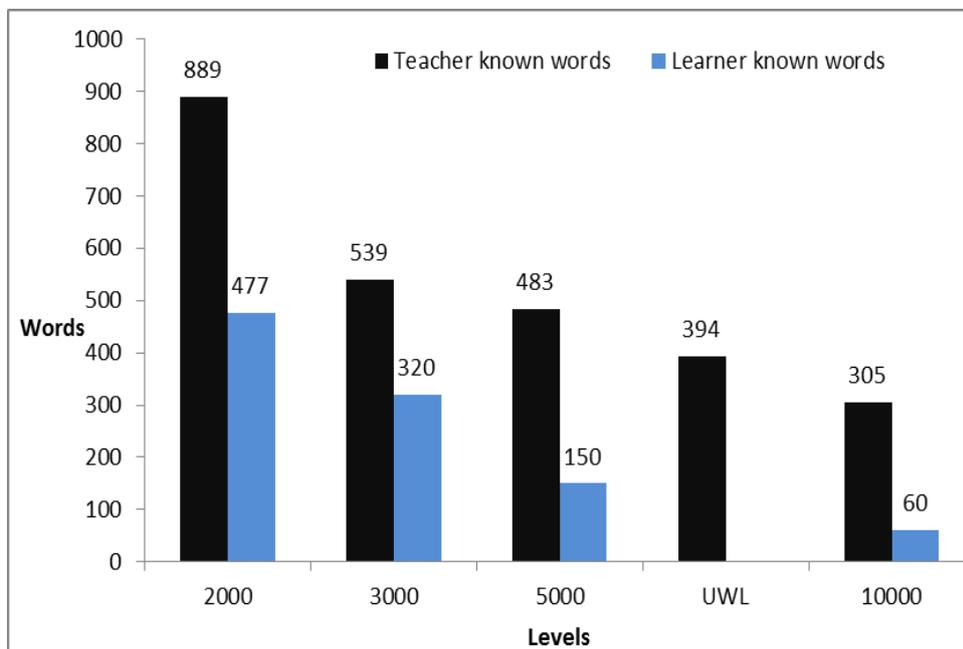


Figure 3.3: Distribution of known words by teachers and learners (pilot)

Figure 3.4 indicates that teachers have a bigger vocabulary than learners, with a large difference at the 2000 word level. However, the differences at other levels do not make teachers sufficiently proficient to teach in the language in view of the large number of words that remain unknown to them.

3.8 Inferential statistics

The results obtained from the PVLТ indicate differences between the means of boys and girls and also between the means of learners and the teachers at all the levels tested. To find out if the differences are statistically significant, inferential tests were performed. To test for the equality of the means between boys and girls and teachers and learners, a t-test was performed. An Analysis of Variance (ANOVA) was also used to determine whether the differences in scores between learners and teachers were significant.

3.8.1 A Comparison of means for boys and girls

To find out if the differences between the mean scores for the boys and the girls had statistical significance, an independent sample t-test was performed which tested for equality of means for boys and girls.

Table 3.10: T-test for equality of means for Boys and Girls by level (n=66, pilot)

Level	t	df	Sig 2-tailed	Mean diff.	Std error diff.
2000	-1.245	64	.218	-1.3	1.0
	-1.245	62.188	.218	-1.3	1.0
3000	-2.531	64	.014	-2.2	.85
	-2.531	61.554	.014	-2.2	.85
5000	-1.848	64	.069	-1.1	.61
	-1.848	59.703	.070	-1.1	.61
10000	-2.185	64	.033	-6.4	.29
	-2.185	63.125	.033	-6.4	.29

Results show that there are no significant differences between the means for boys and girls at the 2000 and 5000 word levels with $t (-1.245)$, $p > .218$ and $t (1.848)$, $p > .069$ respectively. Both the p values are greater than 0.05. However, there is a statistically significant difference at the 3000 and 10000 word levels with a result of $t (-2.531)$, $p < .014$ at the 3000 word level, and $t (2.185)$ $p > .033$ at the 10 000 word level. This indicates that boys found the vocabulary at these levels more difficult than the girls.

3.8.2 Analysis of variance (ANOVA)

An Analysis of Variance (ANOVA) was conducted to determine the statistical significance of the means obtained by the learners and the teachers in the PVLТ. Learners were split into two groups (boys and girls) and the analysis thus compared the three groups. The UWL level was not included because the learners were not tested at this level. Hence only four levels were computed. The results are presented in Table 3.11.

Table 3.11: Analysis of Variance (ANOVA) for Boys, Girls and Teachers (n=76)

Level		Sum of Squares	df	Mean Square	F	Sig.
2000	Between Groups	15598.628	2	7799.314	16.509	.000
	Within Groups	34487.467	73	472.431		
	Total	50086.095	75			
3000	Between Groups	6619.917	2	3309.959	8.535	.000
	Within Groups	28310.232	73	387.811		
	Total	34930.149	75			
5000	Between Groups	10250.374	2	5125.187	26.649	.000
	Within Groups	14039.749	73	192.325		
	Total	24290.123	75			
10000	Between Groups	9835.868	2	4917.934	96.550	.000
	Within Groups	3718.388	73	50.937		
	Total	13554.256	75			

The results of the ANOVA indicate that the difference between the means of the boys, girls and teachers were statistically significant at all levels. At the 2000 word level, there was a significant difference in the means as indicated by the values F (16.509), $p < .000$. At the 3000 word level, there was a significant difference in the means with the value F (8.535), $p < .000$. The 5000 word level also showed a statistically significant difference in means with F(26.649), $p < .000$. The 10000 word level also showed that there was a significant difference in the means with F (96.550), $p < .000$. Teachers performed better than boys and girls.

However, since three groups were compared, it was deemed useful to know which groups differed significantly. A *post-hoc* test was conducted in which a Tukey's Honest Significant Difference (HSD) and a Bonferroni correction were applied. The Tukey's HSD clarified which groups among the sample had significant differences. The post-hoc results are presented in Table 3.12.

Table 3.12: Post-Hoc test for Boys, Girls and Teachers means comparison (n=76)

Dependent Variable	(I) Gender	(J) Gender	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
						Lower Bound	Upper Bound	
Level1Per 2000 level	Tukey HSD	Boy	Girl	-7.07071	5.35091	.388	-19.8724	5.7310
			Teacher	-44.78114*	7.84597	.000	-63.5521	-26.0102
		Girl	Boy	7.07071	5.35091	.388	-5.7310	19.8724
			Teacher	-37.71044*	7.84597	.000	-56.4814	-18.9395
		Teacher	Boy	44.78114*	7.84597	.000	26.0102	63.5521
			Girl	37.71044*	7.84597	.000	18.9395	56.4814
	Bonferoni	Boy	Girl	-7.07071	5.35091	.571	-20.1826	6.0411
			Teacher	-44.78114*	7.84597	.000	-64.0069	-25.5554
		Girl	Boy	7.07071	5.35091	.571	-6.0411	20.1826
			Teacher	-37.71044*	7.84597	.000	-56.9362	-18.4847
		Teacher	Boy	44.78114*	7.84597	.000	25.5554	64.0069
			Girl	37.71044*	7.84597	.000	18.4847	56.9362
Level2Per 3000 level	Tukey HSD	Boy	Girl	-11.95286*	4.84806	.042	-23.5515	-.3542
			Teacher	-28.13131*	7.10866	.001	-45.1383	-11.1243
		Girl	Boy	11.95286*	4.84806	.042	.3542	23.5515
			Teacher	-16.17845	7.10866	.066	-33.1855	.8285
		Teacher	Boy	28.13131*	7.10866	.001	11.1243	45.1383
			Girl	16.17845	7.10866	.066	-.8285	33.1855
	Bonferroni	Boy	Girl	-11.95286*	4.84806	.048	-23.8325	-.0732
			Teacher	-28.13131*	7.10866	.001	-45.5503	-10.7123
		Girl	Boy	11.95286*	4.84806	.048	.0732	23.8325
			Teacher	-16.17845	7.10866	.077	-33.5975	1.2406
		Teacher	Boy	28.13131*	7.10866	.001	10.7123	45.5503
			Girl	16.17845	7.10866	.077	-1.2406	33.5975
Level3Per 5000 level	Tukey HSD	Boy	Girl	-6.22896	3.41410	.169	-14.3970	1.9391
			Teacher	-36.38047*	5.00605	.000	-48.3571	-24.4038
		Girl	Boy	6.22896	3.41410	.169	-1.9391	14.3970
			Teacher	-30.15152*	5.00605	.000	-42.1282	-18.1749
		Teacher	Boy	36.38047*	5.00605	.000	24.4038	48.3571
			Girl	30.15152*	5.00605	.000	18.1749	42.1282
	Bonferroni	Boy	Girl	-6.22896	3.41410	.217	-14.5949	2.1369
			Teacher	-36.38047*	5.00605	.000	-48.6473	-24.1136
		Girl	Boy	6.22896	3.41410	.217	-2.1369	14.5949
			Teacher	-30.15152*	5.00605	.000	-42.4183	-17.8847
		Teacher	Boy	36.38047*	5.00605	.000	24.1136	48.6473
			Girl	30.15152*	5.00605	.000	17.8847	42.4183
Level4Per 10000 level	Tukey HSD	Boy	Girl	-3.53535	1.75701	.116	-7.7389	.6682
			Teacher	-35.06734*	2.57628	.000	-41.2309	-28.9038
		Girl	Boy	3.53535	1.75701	.116	-.6682	7.7389
			Teacher	-31.53199*	2.57628	.000	-37.6956	-25.3684
		Teacher	Boy	35.06734*	2.57628	.000	28.9038	41.2309
			Girl	31.53199*	2.57628	.000	25.3684	37.6956
	Bonferroni	Boy	Girl	-3.53535	1.75701	.144	-7.8407	.7700
			Teacher	-35.06734*	2.57628	.000	-41.3803	-28.7544
		Girl	Boy	3.53535	1.75701	.144	-.7700	7.8407
			Teacher	-31.53199*	2.57628	.000	-37.8449	-25.2191
		Teacher	Boy	35.06734*	2.57628	.000	28.7544	41.3803
			Girl	31.53199*	2.57628	.000	25.2191	37.8449

*. The mean difference is significant at the 0.05 level.

Results from the *post-hoc* tests are presented in two categories at each level, namely the Tukey's HSD and the Bonferroni results. At the 2000 word level, the boys' mean compared to the girls' is not significantly different with *MD* (-7.07071), $p > .338$. The boys' vs. teachers' and girls' vs teachers' means are statistically significant at $p < .000$ with *MD* (-

44.78114) and *MD* (-37.71044) respectively. The Bonferroni results also indicate that boys' vs. girls' means are not significant at $p > .571$ whereas boys vs teacher and girls vs teacher are significant at $p < .000$. The 3000 word level delivered interesting results. Boys vs. girls and boys vs. teachers showed a significance of $p < .042$ and $p < .001$ respectively which means that the boys performance was below the level of both teachers and girls. However there was no significant difference between the means of the girls and teachers at the 3000 level with a value of $p > .066$. This means that teachers and girls performed the same at this level. The Bonferroni results also indicate a value of $p < .077$ between girls and teachers' means, while the boys vs. girls and the boys vs. teachers duplicate the Tukey HSD results ($p = 0.001$). The 5000 word level indicates no significant difference between boys' and girls' means with a value of $p > .169$. The boys vs. teachers and girls vs. teachers remained statistically significant at $p < .000$ meaning that teachers performed better than both boys and girls while boys and girls performed the same. The PVLVT becomes more difficult for the learners compared to the teachers as the levels increase, an indication that learners have not mastered the low frequency vocabulary. The Bonferroni indicates the same results as the Tukey's HSD result with a value of $p > .277$. At the 10000 word level, the boys and the girls means showed no significant difference in Tukey's HSD and Bonferroni with $p > .116$ and $p > .144$ respectively whereas the teachers vs. boys and teachers vs. girls remained significant with the value of $p > .000$. In other words, both boys and girls have not mastered vocabulary at the 10000 word level as compared to teachers.

3.8.3 Results from the interviews

A semi-structured interview was conducted with the two pilot teachers who taught Grade 6 at the pilot school. The interview focused on three major aspects namely 1), Curriculum and Assessment Policy Statement (CAPS) and vocabulary teaching, 2) methods used for teaching vocabulary 3) types of words taught. The purpose of focusing on these aspects was to find out if teachers knew what was expected of them in as far as the CAPS policy is concerned with regard to vocabulary teaching.

3.8.3.1 CAPS Policy and Vocabulary teaching

The interview sought to find out if teachers were teaching according to the Curriculum and Assessment Policy Statement or not.

According to the CAPS;

“Language is a tool for thought and communication and learners’ spoken language needs to be scaffolded (i.e. modelled and supported for example with vocabulary and sentence frames. **A good knowledge of vocabulary provides the foundation for development (listening, speaking, reading and writing) in the FAL.** Learners need to interact with a variety of texts to extend the use of vocabulary and correctly apply it to their understanding of language structures” (Department of Basic Education 2014: 13)

It is apparent that CAPS advocates for the explicit teaching of vocabulary and provides a platform on which vocabulary should be taught i.e. through teaching of language structures such as synonyms, antonyms, homonyms, collocations, prefixes, compound words, idioms, phrasal verbs (to mention a few) and also through use of a variety of prescribed texts such as stories, drama and poetry from which unfamiliar words are encountered (Department of Basic Education, 2014:24). However, there are no specifications about what words should be taught in terms of frequency levels apart from stating that unknown words that are encountered in various reading texts such as stories, drama, poetry, information texts, social texts and media texts should be taught ‘in context’ (Department of Basic Education, 2014 : 21).

From my semi-structured interview with teachers, it became apparent that teachers were not aware of the number of words learners are expected to have acquired at the beginning of Grade 6 and how many words they should acquire by the end of Grade 6. According to the CAPS policy, learners should enter the grade with a common spoken vocabulary of 3250 words at the beginning of term one and acquire 5500 words by the end of term four. Similarly, reading vocabulary should be 2200 words at the beginning of term one and by end of term four they should acquire 5000 words (Department of Basic Education, 2014: 27). I concluded that teachers were not fully teaching vocabulary according to the expectations of CAPS, nor did they know their learners’ vocabulary levels, or how to identify the right words for vocabulary teaching.

3.8.3.2 How words are selected and taught

The teachers indicated that they select words which they think are difficult for the learners. Most of the words are selected before teaching the comprehension passages and are written on the chalkboard under ‘*Vocabulary of the week*’ section. Some words come from the

comprehension passages of the few text books available at the school and are usually highlighted while others come from the language structures for the week. Words for the week become part of the '*Friday Spelling*' words. Learners therefore have to study the spelling of the words for the whole week in preparation for the spelling test on Fridays. Teachers also said that sometimes they pre-teach the words before the texts are read but they agreed that mostly teaching of the words is done during reading or after reading, during discussion time. They also indicated that they normally teach the words once because it is difficult to expose learners to words several times in different contexts because of time constraints to cover the whole FAL syllabus. The teachers also added that they teach new words when they teach words that are often confused in meaning and those which are problematic in spelling such as *immediately, accommodation, committee, separate*, etc. These words do not appear in context but the teachers stated that they put them into context when they explain their meanings.

New words are also taught when they teach new phonic sounds. However, the teachers usually explain the meanings of the words in passing because their main aim is to teach new sounds and pronunciation, and not meaning per se.

A problem they continuously encounter is a lack of textbooks, especially grade level textbooks. This problem resulted in teachers having to use reading material that does not match the level of the learners. It was clear from the information given by teachers that learners were not involved in selecting words for explicit teaching.

3.8.3.3 Methods used for teaching vocabulary

Both teachers stated that they mostly use teacher explanation and the dictionary for vocabulary teaching. The use of the dictionary seems to be the method recommended by CAPS to check the spelling and the meanings of words (Department of Basic Education, 2014:68). However, most learners are not able to use dictionaries because they are not available in class which means teachers resort to verbal explanations after consulting their own dictionary. If they use other methods such as providing synonyms and antonyms for a new word they do so without realising that they are using specific vocabulary teaching methods. Because CAPS emphasises that words should be taught in context, (Department of Basic Education, 2014; 68) teachers also try to use context to explain meanings of new words by using clues offered around the unfamiliar word and then verifying in the dictionary when they are not certain. However, both pilot teachers agreed that they are not aware that they

could teach learners to look for contextual clues to arrive at the meanings of new or difficult words themselves.

For daily assessments, teachers follow the structure of the ANA paper which uses multiple choice type questions. This is done so that learners get used to the ANA questioning technique. Occasionally teachers ask learners to explain meanings of words by using the few dictionaries which are available. The CAPS policy also spells out that teachers should focus on synonyms, antonyms, adjectives, homonyms, homophones, idioms and compound words (Department of Basic Education, 2014: 24). Teachers therefore do not view the teaching of language structures as synonymous with vocabulary teaching. In teaching language structures, for example adjectives, teachers teach the rules of grammar of how adjectives are formed from e.g. nouns, and the functions of adjectives in sentences thereof. They do not go into the details of teaching the meanings of the words in depth. Although learners may increase their receptive vocabulary size incidentally, they remain with superficial knowledge of the words and may not be able to use the words productively.

The next section discusses modifications of the research instruments after the pilot study.

3.9 Modifications of the research instruments

The pilot study was conducted mainly to test the instruments that I intended to use in the main study and also to test the feasibility of procedures before the main study was undertaken. Aspects that needed to be modified are described below.

3.9.1 The controlled Productive Vocabulary Level Tests Version C for learners.

The PVLТ comprises the 2000, 3000, 5000, 10000 and UWL word levels. The 10000 word level proved to be too difficult for the learners – this was indicated by a mean score of 1.10 (raw score) which translated to 6.14% by the pilot learners. The modal score for this level was zero (0) meaning that most of the learners knew none of the words. The maximum score at this level was 6 out of 18, or 33.3%. Because research reveals that knowledge of the 5000 word level together with the UWL is beneficial for developing academic literacy (Meara & Alcoy, 2010; Nation, 2001), I decided to exclude the 10000 word level from the PVLТ for the main study and instead include the UWL from Version B (there is no UWL in Version C). The main study learners were therefore tested in the 2000, 3000 and 5000 word levels from Version C and the UWL level from Version B. I also decided to repeat instructions in the

mother tongue orally, since some pilot learners found it difficult to follow the instructions that were given in English only.

3.9.2 Testing Procedure

During the pilot study I found it was difficult to test teachers separately from the learners because of time constraints. For the main study, it was decided to test the teachers at the same time as the learners so as not to disrupt planned school activities. In addition, because I had to visit at least three schools per day, it was not possible to test learners and teachers separately as this required too much time to be spent in one school.

The next section describes the main study.

3.10 The main study

This section describes the main study. The context of the research area is discussed first followed by a discussion of the participants, instruments, data collection and analysis procedures.

3.10.1 Context of the research area

The main study was conducted in 16 township schools in a single Gauteng district. The government, through the Reconstruction and Development Programme (RDP), whose main aim was to eradicate socioeconomic problems in South Africa, provided people with free low-cost housing units popularly known as RDPs (O'Malley, 1994). Schools, clinics and other infrastructure which provide free services to the population were also constructed in this district. Currently, there are 35 primary schools and 14 secondary schools in the study district. A few private fee-paying schools owned by individuals have mushroomed. Schools are easily accessible and learners travel for less than a kilometre to the nearest primary school. The population exceeds 380000 families ([www.alhdc.org.za>static_content](http://www.alhdc.org.za/static_content)). This township in the study district is one of the biggest informal settlements in South Africa and is characterised by high levels of poverty and unemployment.

3.10.2 Participants

The participants for the main study comprised 881 learners and 19 teachers from 16 township schools.

3.10.2.1 Schools

Eleven public and five independent schools participated in the study. Initially, 20 schools were targeted. However because of the time constraints, two schools could not be reached while the other two could not be tested because the principals would not allow their learners to be tested. All public schools are non-fee paying schools. The LoLT in these schools is English although it seems the use of English is not enforced. All the schools teach both Zulu and Sotho as Home Language because of large numbers of both mother tongue speakers in these schools. Tsonga is also taught in a few schools as Home Language because there are some Tsonga speakers in the township. The public schools in this township are better resourced compared to most independent schools since they all get a 100% subsidy from the government and are supplied with Department of Basic Education workbooks, lesson plans, prescribed textbooks and charts. However, compared to public schools in urban areas, the public schools in this township are not adequately resourced. For example, there are no libraries in the township schools, a resource one would find in public urban schools. About 99% of teachers in the public schools in the study area are trained and only a few had nearly completed their teacher training qualification.

The Independent schools in the study sample are all fee-paying schools. Three of the schools use English as the LoLT but they also teach Zulu and Sotho as Home Languages. The schools all get a subsidy from the government based on their performance in the ANA examinations. The amount of the subsidy is not more than 60% and it depends on the amount of fees paid by each learner. If learners pay high fees, the school receives a smaller subsidy. The schools provide their own learning material. The teachers are invited to attend workshops that are organised by the Department of Basic Education but they do not receive the teaching material that is provided to teachers in the public schools.

3.10.2.2 Learner participants

The learners comprised N=881 between the ages of 11 and 12 years. There were N=404 boys and N=477 girls. The learners' L1 was either Zulu or Sotho with most of them bilingual and able to speak both languages fluently. They also learn either Zulu or Sotho as home languages at school. Most of the learners come from the vicinity of their schools. A few travel by taxi or school bus.

3.10.2.3 Teacher participants

The teacher participants comprised N=8 males and N=11 females. A total of 19 teachers participated in the study. They were 25 years and above and had all been teaching for at least three years. Their first languages (L1) are Zulu, Sotho, Shona and Ndebele. Some are foreign nationals, especially those in the Independent schools. The teachers from the public schools were qualified teachers. Foreign national teachers in independent schools were also qualified while local teachers were studying towards a teaching qualification. Only 19 teachers participated in the study instead of a projected 60. There were many reasons for the smaller participation. Some of them were not confident in themselves. Others claimed that their union, the South African Democratic Teachers Union (SADTU), advised them not to take part in the PVLТ as the test was considered suspicious.

3.11 Ethical considerations

Before data collection started, I sought permission from the principals of all participating schools to conduct research in their schools. Each principal was issued with a letter (Appendix J) seeking permission to test their learners. Two copies of a letters of approval (Appendix D) from the Gauteng Department of Education granting permission to conduct research in the Gauteng schools were issued to the principals. Of the two letters, one copy was issued to the principal and the other to the School Governing Body (SGB) when it was necessary to do so. Upon obtaining permission from the principals to test their learners and teachers, I handed out parents' consent forms (Appendix F, G and H) to learners to take to their parents to sign. The parents' Consent Forms were written in English, Zulu and Sotho. I explained the contents of the consent forms to the learners. Teachers were also given Consent Forms (Appendix E) to read and those who agreed to take the test signed the forms and wrote the test. Learners were also issued with Assent Forms (Appendix I) which they signed before writing the test.

The next section describes the instruments used for data collection.

3.12 Instruments

The main study made use of the following instruments; the Productive Vocabulary Levels Tests, Versions A and C, learners' FAL exercise books, classroom observations and semi-structured interviews.

3.12.1 The Productive Vocabulary Level Test

The PVLTs used in the main study were created by Laufer and Nation (1999). Version C was used for learners (see Appendix A) and version A for teachers (see Appendix B). Version A comprises 5 levels namely; the 2000, 3000, 5000, UWL and 10000 word levels. Version C comprises the 2000, 3000, 5000 word levels and the UWL taken from version B of the PVLt. For the reasons provided in Chapter 3 (see § 3.9.1), the 10000 level was replaced by the UWL (see Appendix A). Each of the levels in both versions has 18 questions. Learners and teachers answered all questions from all levels in their respective tests. As in the pilot study, they were required to complete the partially completed words in each given sentence. The first few letters of the incomplete words are given. Each correct answer scored one mark.

3.12.2 Learners' FAL exercise books

From the schools that participated I sampled 15 FAL exercise books from learners in five schools. The aim was to examine learners' productive use of vocabulary and compare their use of vocabulary to the PVLt levels and the level of words taught by teachers. Learners' written work was analysed using a VocabProfiler (VP) created by Laufer and Nation (1995). Two types of samples were used from learners' exercise books: (1) words that learners encountered in their lessons, such as comprehension texts, spelling words as well as words used to teach phonic sounds and homophones and (2) learners' own productive use of words, such as sentence construction exercises, compositions, letters and diaries. A VocabProfiler was used to sort the words from the writing samples into their respective PVLt frequency levels. The results are presented in Chapter 4 (see Tables 4.15 and 4.16).

3.12.3 Classroom observations

Lesson observations were performed to collect qualitative data from teachers who volunteered to be observed teaching lessons of their choice. The observations were conducted in both language and content subject lessons. The aim of the observations was to determine how vocabulary teaching occurred, what methods of vocabulary teaching were used (if any), what emphasis was placed on vocabulary development in language and content area subjects, and what type of vocabulary was taught. The qualitative data were collected to provide richer information about classroom activities in order to support the analysis of the quantitative data. An Observation Sheet (see Appendix K) was prepared in advance and detailed handwritten notes were made during observations.

3.12.4 Semi-structured Interviews

To further support deductions from the quantitative data, teachers were also interviewed about issues related to vocabulary teaching. An interview schedule with 20 questions was prepared in advance (Appendix L). Responses were recorded by hand on a prepared recording sheet. Voice recordings were avoided because some teachers were not comfortable with the procedure. Responses were grouped into three categories according to categories that were predetermined and drawn from the study before the interview and then analysed. The three categories of concern were CAPS policy and vocabulary teaching, methods of selecting vocabulary for instruction and methods of teaching the selected vocabulary.

3.13 Data collection procedure

Data collection was done in two phases. The first phase involved administering the PVLTs to learners and teachers. The second phase, involved conducting classroom observations, interviewing teachers on matters pertaining to vocabulary teaching and learning and samples of learners' writing. The administration of the tests began by explaining the purpose of the research to both learners and teachers. Learners were issued with Assent Forms, which they signed to show that they had agreed to participate in the study. I read the Assent Form to the learners and emphasized that the test was taken voluntarily. After the learners had signed the Assent Forms, I gave instructions for the PVLt in English and in Zulu and explained to them how they were to answer the questions. In cases where Sotho was required, I asked the teachers to explain to the learners in Sotho. The teachers wrote their version of the PVLt at the same time as the learners after signing teacher consent form to indicate their acceptance to participate. The test was written in 40 minutes. I invigilated all tests personally.

The second phase involved classroom lesson observations, interviewing teachers as well as collecting and analysing samples of learners' written work. The teachers who agreed to participate in the exercise were the same teachers who wrote the PVLt and therefore had already signed the consent forms. I conducted a 30 minute lesson observation with each teacher during which I recorded how the lesson was presented. I observed them teaching English FAL or content subject lessons. The 19 observations were recorded by hand on a prepared lesson observation sheet during the lessons. Immediately after the lesson observation, each teacher responded orally to a 20 question interview. Responses from the interviews were also recorded by hand on a prepared interview recording sheet. After the

lesson observation and interviews, each teacher was asked for at least two learners' FAL exercise books from which I selected samples of learners' written work for analysis. The information thus collected was for triangulation purposes with the PVLТ.

3.14 Data analysis

The quantitative data were analysed using SPSS version 23. Both descriptive and inferential statistics were used to analyse the data. Data analysis was preceded by a data cleaning process as outlined below.

3.14.1 PVLТ Data cleaning and scoring

The data cleaning process involved detecting and correcting or removing inaccurate records from the raw data. I entered the PVLТ data set into the SPSS programme and ran it for frequency distribution. This was done to ascertain if the correct number of learners and teachers was entered into the SPSS programme. The frequency distribution output indicated that there was a missing variable in the teacher data set – upon closer inspection it was found that a duplication of one teacher respondent had caused the error in which 20 instead of 19 teachers had been entered. The error was cleared and the correct data set was deemed ready for statistical analysis.

Scoring of the PVLТ was done as in the pilot study (see § 3.4.4.1). Each correct answer was worth one mark. Participants were not penalised for spelling errors or for using the wrong tense in an answer. The scores were first recorded in their raw form and then in percentages. The 25th, 50th and 75th percentiles were also calculated to determine how learners in the named percentiles performed. Results were presented in tables and graphs (see Chapter 4).

3.14.2 Statistical techniques

Descriptive and inferential statistics were used to analyse the PVLТ data. Using the SPSS version 23, measures of central tendency, which are the mean, median, and mode of learner and teacher scores for each frequency level, were computed. For measures of dispersion, the range which shows the difference between the minimum and the maximum scores for each level was also calculated. In addition, the standard deviations, which show the spread of scores around the means, were computed. Maximum and minimum scores for each level were calculated and it was calculated how learners performed at the 25th, 50th and 75th percentiles.

Descriptive statistics were used to calculate the schools' means for all levels for learners in each school. Hence the means, median and standard deviations were calculated for each school. In addition, the minimum and maximum scores as well as the range were calculated for each school to determine which schools scored better in the PVLТ.

Inferential statistics was used to determine whether the differences that were observed between the mean scores of teachers and learners and between the boys and girls were of statistical significance. To determine if the differences between the scores of the boys and of girls within schools had statistical significance, an independent t-test was performed which tested for equality of means for boys and girls within schools. According to Pallant (2007), if the p value is smaller than .05 ($p < .05$), it means that differences between the means are statistically significant. If the p value is greater than .05 ($p > .05$) there is no significance in the differences between the scores.

An Analysis of variance (ANOVA) was used to determine the statistical difference of the means obtained by the learners and the teachers in the test vocabulary levels. Learners were split into two groups (boys and girls) and the analysis thus compared three groups namely boys, girls and teachers. The 10000 level was not computed because the learners were not tested in the level. An ANOVA was also performed to test for equality of means among the schools.

Because three groups were compared, a *post-hoc* test was conducted in which a Tukey's Honest Significant Difference (HSD) and a Bonferroni correction were applied. The Tukey's HSD clarifies which groups among the sample differ significantly. The results of data analysis are discussed in detail in Chapter 4.

3.15 Conclusion

This chapter described the methodology used in the pilot and main study. The chapter began by outlining the purpose of the study and describing the research method, the approach, the research design, the hypotheses and research questions, the procedure for data collection and analysis as well as ethical considerations. Next, the pilot study and its results were presented. The chapter also briefly described the modifications that were made to some of the instruments for the main study, and described the main study. Finally, data cleaning, statistical and inferential techniques used in the main study were presented. The next chapter will focus on data presentation and discussion of the results.

CHAPTER 4

FINDINGS: PRESENTATION AND DISCUSSION

4.0 Introduction

This chapter analyses, presents and discusses the findings of the main study. The results are presented in accordance with the research questions outlined in Chapter 3 which read as follows:

Research question 1: *What is the productive vocabulary size of township school learners as measured by the Productive Vocabulary Levels Test?*

Research question 2: *What is the productive vocabulary size of the township school teachers as measured by the Productive vocabulary Levels Test?*

Research question 3: *What kind of vocabulary instruction takes place in Grade 6 township schools?*

Research question 4: *What percentage of words at different VLT levels do learners use in their writing?*

The next section starts with a summary of the participants in the study.

4.1 Participants

Eight hundred and eighty-one (n=881) learners from 16 schools participated in the study. Nineteen (=19) teachers also participated in the study. The distribution of participants was as follows:

Table 4.1: Distribution of participants

Respondents	Frequency	%
Girls	477	54.1
Boys	404	45.9
Total	881	100.0
Teachers	19	100.0

The number of learners surpassed the number that was projected (600) by 281. There was an overwhelming response from both parents and principals who were keen to know the

performance levels of their children. Learners' vocabulary levels were measured by administering the Productive Vocabulary Levels Test Version C and teachers' via the PVL Version A.

4.2 Results from the Productive Vocabulary Levels Test for Learners

Learners who were administered with the PVL Version C were tested at the 2000, 3000, 5000, and the UWL levels. The minimum and maximum scores, range, means and standard deviations of the 4 levels were computed and the results are presented in Table 4.2 below. Each level had a total score of 18.

Table 4.2: Descriptive statistics of learner PVL in raw scores (main study, N=881)

Levels	N	Minimum	Maximum	Mean	Std. Deviation
2000	881	.00	17.00	5.1839	3.60464
3000	881	.00	16.00	2.9183	2.69682
5000	881	.00	13.00	1.5573	1.82575
UWL	881	.00	12.00	1.7128	1.92068

Table 4.2 displays a general poor learner performance in the PVL. The mean score for the 2000 level is very low at 5.2 despite the fact that the maximum score obtained is 17. The mean score is depressed by the majority of learners obtaining very low scores. The means decrease with the increase in word levels, with the UWL showing the lowest mean score at 1.7. The same scores are presented in percentages in Table 4.3.

Table 4.3: Descriptive statistics of learner PVL in percentages (Main study, N=881)

Levels	N	Minimum %	Maximum %	Mean %	Std. Deviation
2000	881	.00	94.44	28.7993	20.02577
3000	881	.00	88.89	16.2126	14.98236
5000	881	.00	72.22	8.6518	10.14305
UWL	881	.00	66.67	9.5157	10.67047

The results indicate that the minimum score in all levels is zero while the maximum scores range from 66.67% to 94.44% in all levels. A maximum score of 94.44% indicates that there are some good learners who scored high marks at the level. It can be concluded that these learners are proficient in English as indicated by their good performance in the PVL as

asserted by Al-Dersi (2013: 73) that vocabulary knowledge is one of the language aspects that determine one's proficiency in a language.

The results are discussed in more detail per word level in the sections that follow.

4.2.1 The 2000 word level

Learners' overall mean score of 28.8% at the 2000 word level is of great concern. Nation (2001) contends that the 2000 word level is crucial for basic everyday communication but not for comprehension of academic text. In fact, Schmitt et al. (2011) point out that learners with competence at the 2000 words level are poor readers. For learners to read authentic texts they need knowledge of at least the most frequent 3000 words, which is considered as the threshold which allows learners to begin to read authentic texts (Nation, 2001). The standard deviation of 20.0 at the 2000 level shows that although the maximum score was 94.4%, the scores were spread far from the mean with scores between 94.4% and 0%. It is therefore concerning to note that in Grade 6 the year before the start of the Senior Phase, learners' have so little knowledge of the first 2000 words in English. It is therefore important that teachers focus on teaching the 2000 word level as Nation (2001), Laufer and Nation (1999) contend that the 2000 level is the most crucial level for basic communicative ability.

4.2.2 The 3000 word level

The 3000 word level with a mean score of 16.2% is also of concern. Vocabulary knowledge comes about when receptive vocabulary is transformed into productive knowledge through multiple exposure of new words after reaching a threshold which is estimated to be 3000 words (Meara & Alcoy, 2010). Yamamoto, (2011: 227) also states that knowledge of the 3000 word level is needed to transform receptive vocabulary into productive vocabulary and that for learners to transform receptive vocabulary into productive vocabulary, they need to surpass the 3000 word threshold and also need to know some of the words at the 5000 level. Adequate vocabulary knowledge of each level of the PVLTL should be 90% or more (Nation, 2001). This range allows learners to understand at least 80% of all the words in a text - more than 80% allow them to understand authentic texts. The standard deviation of 14.9 indicates that scores were clustered around the mean indicating that most learners' score were close to the mean of 16.2%. The results presented in Tables 4.2 and 4.3 indicate that the tested learners lack the vocabulary size that enables them to transform receptive vocabulary into productive vocabulary.

4.2.3 The 5000 and the University Word List (UWL)

The mean score for the UWL is 9.5% while the mean for the 5000 word level is 8.7%. This is concerning because learners need to read advanced texts and content subject texts in Grade 6 and they need to understand at least 95% to 98 % of the words in the texts to ensure comprehension. The means of 8.7% and 9.5% are too low to enable them to read fluently let alone to comprehend academic texts. At the 5000 and UWL levels the standard deviations are, 10.1 and 10.7 respectively indicating that the scores were clustered around the means 8.7% and 9.5% respectively. It means that most learners obtained scores that were close to the means. Yamamoto (2011: 228) suggests that teachers need to scaffold vocabulary learning through the implementation of well executed vocabulary instruction programmes so that weaker learners can improve their vocabulary. The means obtained by learners at the 2000, 3000, 5000 and UWL levels indicate that learners' vocabulary size is very small.

The median and the mode of the PVLТ scores for all the tested levels are presented in Table 4.4. The table also shows how learners in the 25th, 50th and 75th percentiles performed.

Table 4.4: The mode, median, 25th, 50th and 75th percentiles (N=881)

	2000 Level	3000 level	5000 level	UWL
	%	%	%	%
N Valid	881	881	881	881
Mean	28.7993	16.2126	8.6518	9.5157
Median	27.7778	11.1111	5.5556	5.5556
Mode	22.22	.00	.00	.00
Minimum and Maximum	0.00-94.44	0.00-88.89	0.00-72.22	0.00-66.67
Percentiles 25	11.1111	5.5556	.0000	.0000
50	27.7778	11.1111	5.5556	5.5556
75	38.8889	22.2222	16.6667	16.6667

At the 2000 level, the results show a low median of 27.8% which is one score below the mean indicating that learners' scores are very low. The modal score of 22.2% indicates that at the 2000 level most learners obtained 22.2%, a score which is too low for academic success at Grade 6 level. The modal scores for the 3000, 5000 and the UWL levels indicate that the majority of learners scored zero (0%). The results therefore portray poor productive vocabulary knowledge for the majority of learners for those levels.

Learners in the 25th percentile scored badly at all levels with a mean of 11.1% for the 2000 word level and zero (0%) at the 3000, 5000 and the UWL levels respectively. Learners in the middle group, the 50th percentile, also scored poorly with 2000 level scores below the mean of 28.8%. The stronger learners in the 75th percentile scored 38.9%, also a poor score as they less than 50% for the test.

4.2.4 Average number of known words per learner

From the results presented in Table 4.4 above, the average number of words known by learners in each of the 4 levels was calculated. Each level of the PVLТ has 18 questions with each question scoring 1 mark. The 18 words in each level of the test are a representative sample from their respective levels. To obtain the number of words known at the representative levels, I multiplied the mean scores obtained by learners for each level by 100 and divided the output by 18 to calculate the number of words known. The results are shown in Figure 4.1.

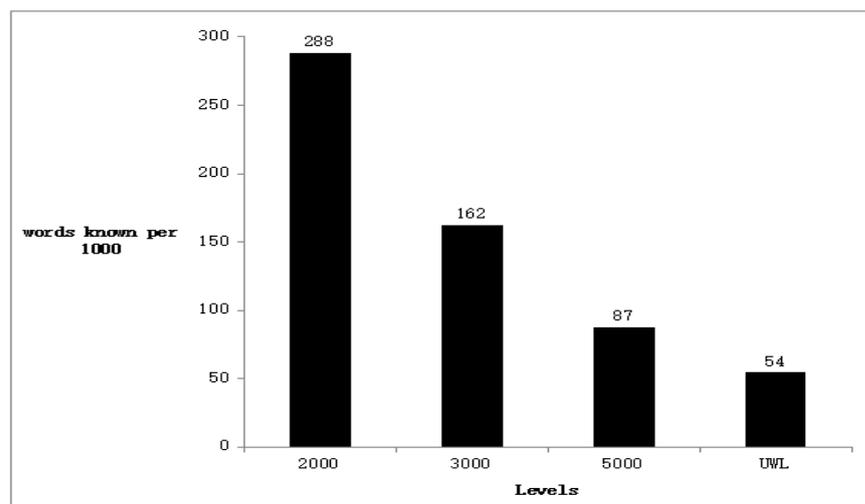


Figure 4.1: Number of known words by learners (N=881)

The figure indicates that at the 2000 word level, learners have knowledge of 288 words out of 1000 words. At the 3000 level, learners know an average of 163 words. At the 5000 and UWL levels, learners know an average of 87 low-frequency words and 54 academic words respectively. The results indicate that learners found the UWL level more difficult than the 5000 word level. However learners performed poorly at both levels, a concerning result considering that knowledge of words at these levels increase comprehension of academic texts in particular. The 2000 word level is a cause for concern since knowledge of these

words is the most crucial in all communication. It is therefore crucial that teachers explicitly teach words at the 2000 word level so that learners can use knowledge gained to acquire words in the lower frequency levels.

I also compared the number of known words and the number of unknown words by Grade 6 learners. It is concerning to find that among the tested Grade 6 learners, the number of unknown words far exceeds the number of known words. The results are illustrated in Figure 4.2.

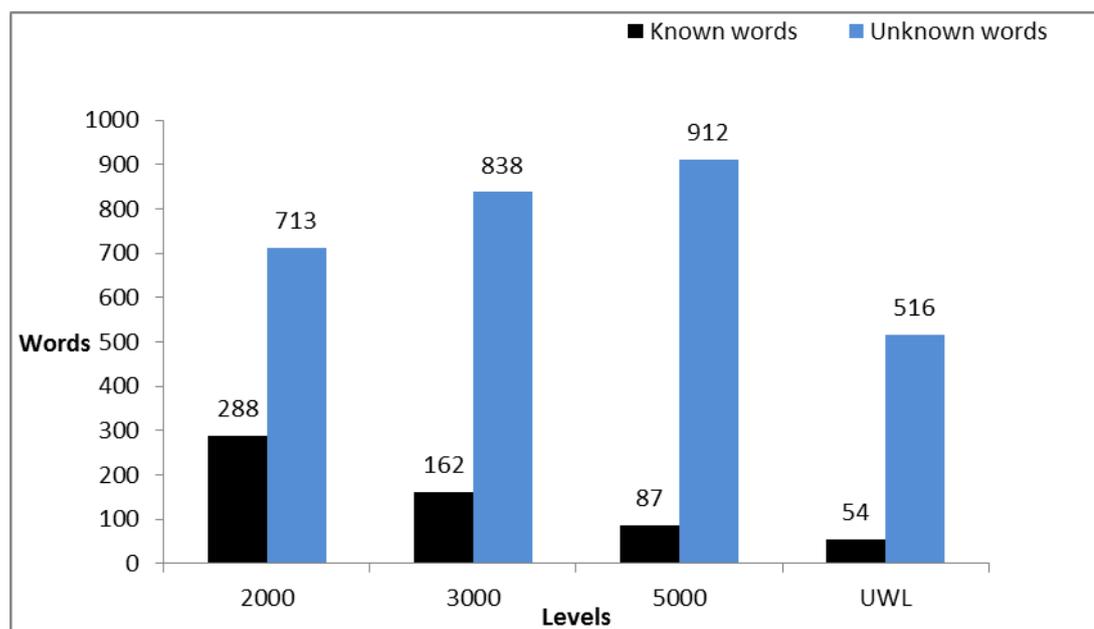


Figure 4.2: Known vs. unknown words by learners (N=881)

Figure 4.2 clearly indicates that the number of words learners know per level is very low and decreases as word levels increase, compared to the number of unknown words which is very high and which increases with the increase in levels. It seems that learners find the 5000 level particularly difficult as 913 words are unknown and only 87 are known.

Learner's poor vocabulary levels would not enable them to function efficiently in the ESL. It also will not allow them to perform academically in their present grade. In fact, their small vocabulary size has implications for their academic performance in higher grades. Considering that Nation (2001) contends that knowledge of the 5000 word level (as well as the UWL) enables a reader to understand 90% of any given text, it seems clear that urgent attention to vocabulary teaching and development is necessary for these learners.

4.2.5 PVLТ results: Boys vs. Girls

A comparison was also made between the PVLТ results for boys and girls. The ANA 2014 national statistics indicate that girls outperform boys in mathematics, Home Language and First Additional Language (DBE, 2014). Table 4.5 shows the results in the means obtained by the boys and the girls in all the levels tested.

Table 4.5: Comparison of means for boys and Girls in % (Boys-N=404, Girls-N=477)

Level	N	Range %	Minimum	Maximum	Mean %	Std. Deviation
2000 Boys	404	88.89	.00	88.89	26.1689	19.79646
2000 Girls	477	94.44	.00	94.44	31.0273	19.96893
3000 Boys	404	66.67	.00	66.67	15.0578	14.14667
3000 Girls	477	88.89	.00	88.89	17.1908	15.60324
5000 Boys	404	50.00	.00	50.00	6.7519	8.37694
5000 Girls	477	72.22	.00	72.22	10.2609	11.18622
UWL Boys	404	50.00	.00	50.00	7.8520	9.43348
UWL Girls	477	66.67	.00	66.67	10.9248	11.43739

The results in Table 4.5 indicate that girls outperformed boys at all levels. Although both boys and girls registered zero for the minimum scores at all levels, girls obtained higher maximum scores in all the tested levels with the highest score of 94.4% at the 2000 level compared to the 88.9% for the boys. At the 3000 level girls highest score was 88.9% while the boys' highest score was 66.7%. The 5000 level shows that girls highest score was 72.2% compared to the boys' highest score at 59%. At the UWL level, the score for girls is 66% and boys 50%. Similarly, the means at the 2000 level indicate that girls obtained 31% while boys lagged behind with 26.1%. This trend was maintained at all levels.

According to Nation (2001) a score of 90% at any level means that the learner has knowledge of 900 words at that level and is able to infer meaning of the remaining 100 unknown words from context. Nation (2001) contends that such a learner has a good vocabulary size and is able to comprehend texts with ease. The results for the girls in this sample are closer to the 90% referred to by Nation (2001) at the 2000 and the 3000 levels than the boys. The same trend is observed at all the levels. It is also interesting to note that at the UWL level which both boys and girls learn in the classroom through content subjects, girls still have higher means than boys. The results indicate that girls probably read more than boys hence their

vocabulary level is higher than that of the boys. The higher scores could also be attributed to natural maturation since girls tend to mature faster in their pre-teen years than the boys.

4.2.6 Number of known words: Boys vs. Girls

The number of words known by boys and by girls was calculated and compared. The results are presented in figure 4.3

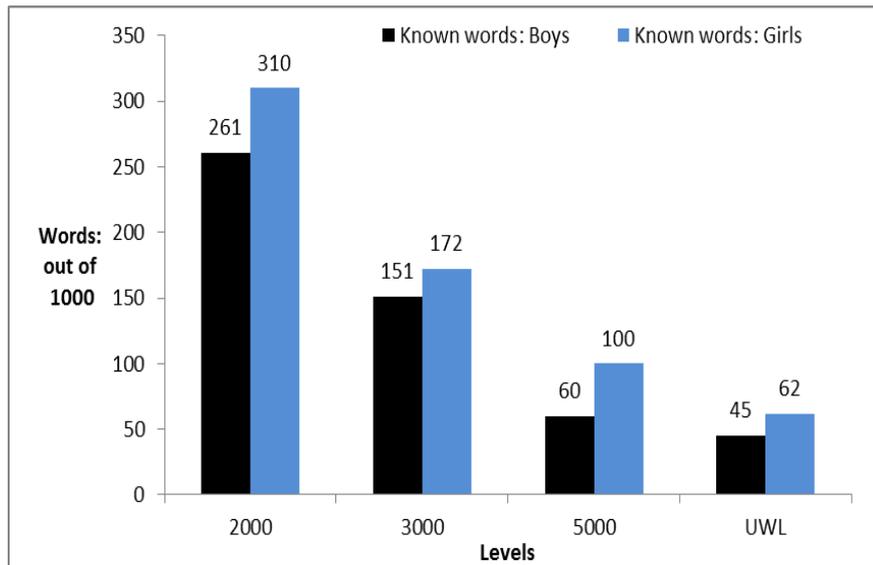


Figure 4.3: Comparison of known words: boys vs. girls (Boys-N=404, Girls-N=477)

Figure 4.3 indicates that girls outperformed boys at all levels. At the 2000 level, girls knew 310 words while boys knew 261 words. At the 3000 word level girls knew 172 words while boys knew 151 words. At the 5000 level girls had knowledge of 100 words while boys knew 60 words. Finally at the UWL girls knew 62 words while boys knew only 45 words.

However, in order to be able to generalize the results of the boys and girls of this study sample to the wider population, it was necessary to find out if there was a significant difference in their scores (see § 4.2).

4.2.7 Total vocabulary mean for learners

The mean for the total vocabulary was computed for all the 16 schools tested. The score was obtained by adding the scores of the four levels for each learner and then adding the total scores for all the 881 learners and dividing the grand total by the number of learners to obtain the total vocabulary mean. The SPSS programme was used to calculate the total vocabulary

mean, the standard deviation, minimum and maximum scores as well as the 25th, 50th and the 75th percentiles. The results are displayed in Table 4.6.

Table 4.6: Total vocabulary for learners (main study N=881)

N Learner	Valid	881
	Missing	0
Mean		15.7949
Std. Deviation		12.09536
Minimum		.00
Maximum		73.61
	25	6.9444
	50	13.8889
	75	22.2222

As seen in Table 4.6, the mean total vocabulary for all learners is very low at M-15.8% which is an indication that the learners' productive vocabulary is very small. Learners scored poorly at the 2000 word level and performed even worse at the 3000, 5000 and the UWL levels where most of them scored zero (0%), thus depressing the total vocabulary mean to 15.8%. Students at the 25th percentile performed poorly with a mean score of 6.9%, Learners at the 50th percentile scored 13.9% and the top learners at the 75th percentile also performed poorly with a mean score of 22.2%. The results indicate that the participating learners have not yet mastered the vocabulary needed at the different levels to perform adequately academically.

4.2.8 Vocabulary total means for individual schools (VTM)

The means for the total vocabulary knowledge at all levels for each of the 16 schools are presented in Table 4.7 together with the schools' performance at the 25th, 50th and the 75th percentiles. For purposes of anonymity and confidentiality, the schools' names are provided using letters of the alphabet

Table 4.7: Vocabulary total means (VTM) for schools in % (N-16 schools)

School	N	Minimum %	Maximum %	Mean %	Std. dev.	Percentiles		
						25th	50th	75th
A	39	.00	47.2	22.2	9.6	15.2	20.8	29.2
B	76	.00	69.4	19.6	15.1	7.3	18.1	27.8
C	66	.00	44.4	11.7	11.1	3.8	9.0	15.3

School	N	Minimum %	Maximum %	Mean %	Std. dev.	Percentiles		
						25th	50th	75th
D	39	11.1	73.6	29.1	14.6	18.1	25.0	34.7
E	36	.00	50.0	17.3	10.5	10.1	16.7	24.7
F	70	.00	44.4	11.6	9.31	4.2	10.4	16.7
G	35	.00	36.1	13.9	8.9	8.3	12.5	20.8
H	68	.00	56.9	19.0	11.5	11.1	16.7	24.7
I	24	1.4	33.3	13.4	8.5	7.6	11.1	16.3
J	29	2.8	37.8	13.8	8.8	6.3	15.5	17.4
K	35	.00	55.6	15.8	15.1	4.2	9.7	25.0
L	81	.00	45.8	12.4	9.8	5.6	11.1	16.7
M	82	.00	47.2	13.9	11.5	4.2	12.5	20.8
N	62	.00	36.1	10.9	8.13	4.2	7.6	17.0
O	78	.00	45.8	16.8	11.2	8.0	15.2	25.00
P	61	.00	73.6	17.0	14.2	5.6	13.9	25.7

As indicated earlier, (see § 4.2.7, Table 4.6) the mean vocabulary total for all vocabulary levels in all schools in the study is 15.8%, which indicates that learners in all the schools generally have a poor total vocabulary size. The mean total vocabulary for each school shows variations in the mean totals. The highest vocabulary total mean was in school D with 29.1% and the lowest was 10.9% for school N. School D is a private English medium school where communication in English inside and outside classes is enforced. However, learners revert to their mother tongue when speaking at home. Schools B, H, I and K are independent schools with a number of foreign national teachers, most of whom communicate with learners in English. The remaining schools A, C, E, F, G, J, L, M, N, O and P are public schools which do not emphasize the use of English in and outside the classroom. All the schools except school D show means below the total schools mean (15.8%), indicating that all learners' total vocabulary size is very low.

Having discussed the learners' PVLТ results, we now turn to the teachers' results.

4.2.9 Results of the Productive Vocabulary Level Test for teachers

Teachers were administered the PVLТ Version A which comprises five levels, namely the 2000, 3000, 5000, UWL and 10000 frequency levels. As in the case with the learners, the

total vocabulary scores for teachers are presented in the form of the minimum score, maximum score, mean and the standard deviations.

Table 4.8: The descriptive statistics results for teachers in raw scores

Levels	N	Minimum	Maximum	Mean	Std. Deviation
2000	19	10.00	18.00	15.5263	2.14394
3000	19	6.00	18.00	12.4211	3.42078
5000	19	4.00	18.00	10.2632	3.66427
UWL	19	.00	17.00	9.2105	4.14433
10000	19	.00	14.00	6.0000	3.36650

The results indicate that teachers performed better than learners in the PVLТ with maximum scores of 18 at the 2000, 3000, and 5000 levels. However in the UWL and the 10000 levels, some teachers scored zero meaning that they have not yet mastered the vocabulary at those levels.

The same scores are presented in percentages in Table 4.9 showing the mode, median, range, the minimum and the maximum scores obtained in the PVLТ. In addition, the performance of the teachers in the 25th, 50th and the 75th percentiles is also presented.

Table 4.9: The mean, mode, median, minimum, maximum, range and percentiles for teachers (N=19)

		2000 in %	3000 in %	5000 in %	UWL in %	10000 in %
N	Valid	19	19	19	19	19
	Missing	0	0	0	0	0
Mean		86.2575	69.0057	57.0174	51.1695	33.3333
Median		83.3333	72.2222	55.5556	50.0000	33.3333
Mode		100.00	66.67	55.56	38.89	22.22
Std. Deviation		11.91016	19.00470	20.35729	23.02419	18.70286
Range		44.44	66.67	77.78	94.44	77.78
Minimum-Maximum		55.56-100	33.33-100	22.22-100	.00-94.4	.00-77.78
Percentiles	25	77.7778	55.5556	44.4444	38.8889	22.2222
	50	83.3333	72.2222	55.5556	50.0000	33.3333
	75	100.0000	83.3333	66.6667	66.6667	38.8889

Although some teachers scored 100% at some levels, the mean score for the levels indicates that generally teachers' vocabulary knowledge is below what one would expect from a teacher. As explained earlier, Nation (2001) contends that sufficient vocabulary knowledge at any level should be 90% and above. In fact, vocabulary knowledge of 90% at all levels gives

the reader 80% coverage of any written text because the reader will know the meanings of most of the words used in that text (Nation 2001). In addition, the reader can infer the meanings of the remaining unknown words from the context resulting in total comprehension of what is read. The 2000 word level contains 80% of the running words in any text and is therefore crucial for the comprehension of most texts. The mean of 86.3% for the teachers at the 2000 word level falls short of the ideal of 90%, although 86.3% affords teachers the ability to conduct basic communication. It follows therefore that 86.3% can result in problems of reading comprehension and the ability to teach (in) English effectively.

The median as indicated in Table 4.9 is lower than the mean for all levels except at the 3000 word level where it is higher (72.2%) than the mean of 69% for the level. For instance at the 2000 word level, the median is 83.3% while the mean is 86.3%. The mode which indicates the most frequent score obtained is 100% at the 2000 word level, 66.7% at the 3000 word level, 55.6% at the 5000 level, 38.9% at the UWL and 22.2% at the 10 000 word Level. The most frequent score has implications for the overall mean score. In this case the modal scores for the other 4 levels, namely the 3000, 5000, UWL and the 10 000 word levels, resulted in depressed mean scores for the levels except at the 2000 word level where the modal score raised the score for the level.

Table 4.9 also indicates that the 2000 word level has the smallest standard deviation (SD-11.9) compared to other levels. The standard deviation of (SD-11.9) at the 2000 word level indicates that most scores in this level were all high and clustered around the mean whereas in other levels, especially the UWL (SD-23.0) the scores were spread far from the mean as also revealed by the range of 94.4. The range indicates that there are some teachers who obtained very low scores (0%) and others who obtained very high scores (94.4%).

I was also interested in the performance of teachers at the 25th, 50th and 75th percentiles. Teachers at the 25th percentile scored high means (77.7%) at the 2000 word level compared to other levels. The scores decrease to 22.2% at the 10000 word level. At the 50th percentile, the scores are high showing that teachers with a mediocre score had a fair knowledge of the words at all levels except the at the 10 000 word level. The scores also decreased as the word levels increased. Teachers at the 75th percentile performed fairly well with 100% at the 2000 word level, 83.3% at the 3000, 66.7% at the 5000 word level and 66.7% at the UWL. However, the 10 000 word level proved to be difficult even for these teachers with low mean scores of 38.9%.

The total vocabulary mean score for teachers was calculated by adding the mean for all word levels for each teacher and then adding the totals for all teachers and dividing the total by the number of teachers. The results are presented in Table 4.10.

Table 4.10: Total vocabulary mean for teachers (N=19)

Teacher N	Valid	19
	Missing	0
Mean		65.8626
Std. Deviation		16.13953
Minimum		33.33
Maximum		98.61
Percentiles	25	54.1667
	50	65.2778
	75	73.6111

The total vocabulary mean for teachers was 65.9% compared to the learners' mean of 15.8%. Teachers clearly had a bigger vocabulary size compared to learners. However it was also clear that teachers' vocabulary size was not adequate. Teachers need to improve their low-frequency vocabulary knowledge to reach levels that enable them to handle and teach academic texts. From the teachers' mean scores, the known words per level were calculated as shown in Table 4.11.

Table 4.11: Number of words known by teachers (N=19)

Level	Number of words known
2000	863
3000	690
5000	570
UWL	292
10000	333

Each level has 1000 words except the UWL with 570 words. A mean of 86.3% at the 2000 word level leaves 863 known words at that level. If 863 words are known at the 2000 word level, it means that teachers' vocabulary size is not large enough considering that the 2000 word level comprises the most frequent content words necessary for conducting basic communication. Meara and Alcoy (2010) assert that the 3000 word level is also important

because knowledge of words at this level will enable ESL learners to access meanings of words in the lower frequencies and help to increase comprehension. In the UWL, there are 570 words and therefore the number of words known is 51% of 570 words, which is 292 words. The number of words known by teachers decreased with the increase in levels, with as few as 333 known words at the 10000 word level indicating a low vocabulary size.

At the UWL level, teachers' knowledge of 292 words indicates that teachers would probably struggle to cope with more difficult academic texts. It seems safe to conclude that teachers' vocabulary size has implications for their performance in the classroom, especially with regard to vocabulary teaching, and that they would struggle to teach academic texts containing lower-frequency words effectively.

The number of unknown words at the same levels was calculated in the same way as for learners. Figure 4.4 illustrates the number of words known and unknown by teachers at each level.

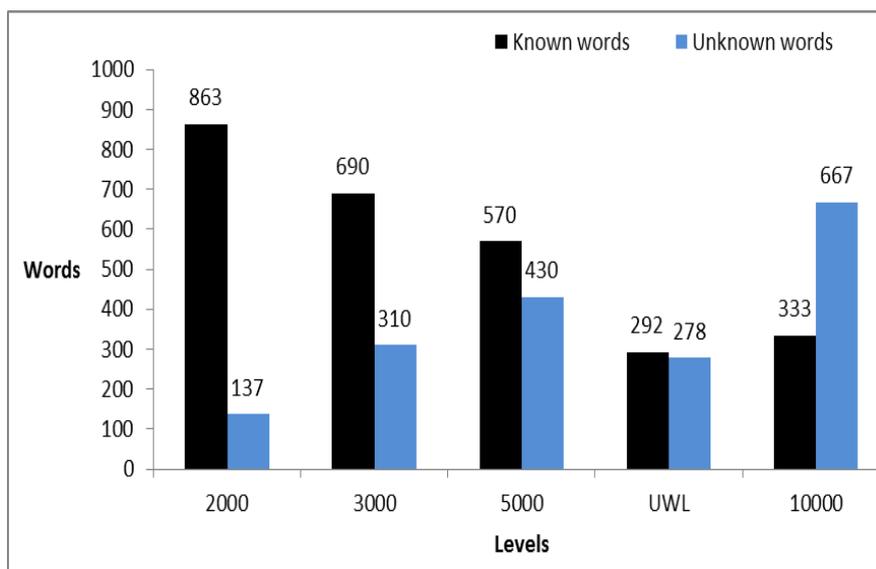


Figure 4.4: Known and unknown words by teachers (N=19)

Figure 4.4 indicates that as is the case with the learners, teachers' known words decreased as the levels increased, while unknown words increased with the increase in levels. At the UWL level, known words are slightly more than the unknown words and the difference between the known and the unknown words is smaller than at the other levels.

4.2.10 Known words: teachers vs. learners

The difference in known words between teachers and learners is also shown in the Figure 4.5.

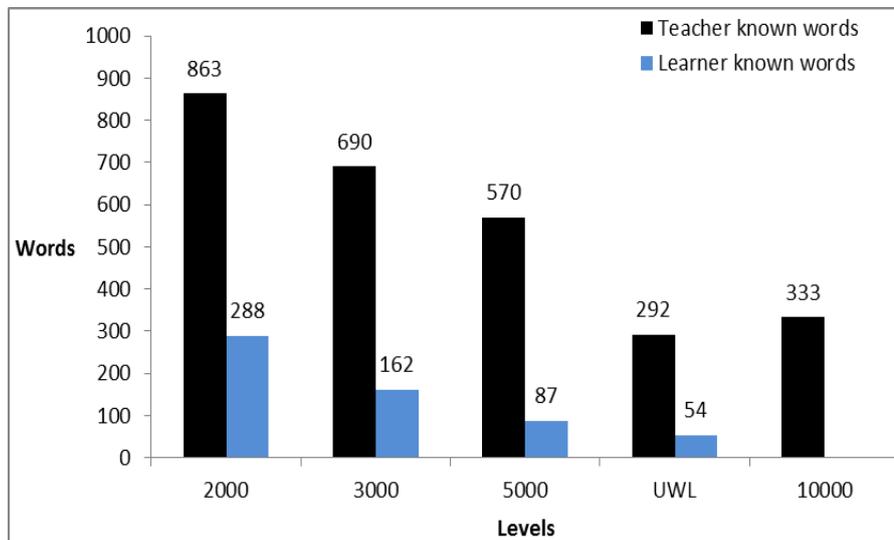


Figure 4.5: Known words: teachers (N-19) vs. learners (N-881)

Figure 4.5 shows the difference between learner and teacher PVLТ known words in the four levels tested. Learners were not tested in the 10000 word level as the pilot results indicated that this level was too difficult for them. The number of words known by learners is almost three times smaller than the number known by teachers in all levels. Although these scores are encouraging, teachers' scores cannot be considered adequate for what is expected of teachers and reflect their lack of proficiency in ESL - a lack of proficiency that reflects back to learners whose scores - especially at the most crucial 2000 level - are very low.

The next section strives to determine if the differences in scores between the teachers and between boys and girls are statistically significant.

4.3 Inferential statistics

Dornyei (2007) contends that inferential statistics helps researchers to test for statistical significance and to generalize their findings beyond the sample. The PVLТ means between boys and girls and between learners and teachers indicated that there is a difference between the means at all levels, with girls having higher scores than boys and teachers having higher scores than learners. Therefore, to find out if the differences between the scores were statistically significant, inferential tests were performed.

4.3.1 Independent Sample t-test

To determine if the difference between boys' (N=404) and girls' (N=477) means were statistically significant an independent samples t-test was performed to test for equality of means. The results of the t-test are presented in the Table 4.12.

Table 4.12: An independent sample t-test for equality of means for boys and girls (N=881)

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Respondents:										
Word Level										
								Lower	Upper	
2000	Equal variances assumed	.731	.393	3.585	879	.000	.86822	.24221	.39285	1.34359
	Equal variances not assumed			3.588	857.902	.000	.86822	.24201	.39321	1.34323
3000	Equal variances assumed	1.190	.276	2.144	879	.032	.39023	.18202	.03299	.74748
	Equal variances not assumed			2.161	874.952	.031	.39023	.18055	.03588	.74459
5000	Equal variances assumed	24.434	.000	5.191	879	.000	.63161	.12167	.39282	.87040
	Equal variances not assumed			5.314	866.389	.000	.63161	.11886	.39833	.86490
UWL	Equal variances assumed	11.271	.001	4.328	879	.000	.55728	.12876	.30458	.80999
	Equal variances not assumed			4.398	878.303	.000	.55728	.12672	.30857	.80599

Table 4.12 indicates that at all levels, the differences between the boys' and the girls' means were statistically significant. According to Levene's test for Equality of Variance, there was equal variance assumed between boys' and girls' means as indicated by $F = .731$ which is greater than 0.05. At the 2000 level, $t = 3.585$, $p < .000$ indicated a significant difference between boys' and girls' means. If the p value is less than .05, the difference is statistically significant (in this case the p value is 0.000). At the 3000 level, there is a significant difference between the means for boys and girls with $t = 2.144$, $p < .032$. However, the level of significance is smaller than at the 2000 level as shown by the smaller t value of 2.144. Again the p value is less than .05. At the 5000 word level and UWL, the results indicate that the

differences are significant with $t = 5.191$, $p < .000$ and $t = 4.328$, $p < .000$ respectively. The levels of significance are much higher at these levels with $t = 5.191$ and 4.328 respectively, compared to the 3000 level. The t-test thus reveals that there is a statistically significant difference between the boys' and the girls' means.

4.3.2 Analysis of variance (ANOVA)

An Analysis of variance (ANOVA) was performed to determine whether the differences in the means between learners and teachers for the levels tested were statistically significant. The sample size for teachers (19) was a small sample to be compared with the number of learners (N=881). The small sample size could affect the statistical significance levels. According to Dornyei (2007: 100) 'a basic requirement in quantitative research is that the sample should include 30 or more people' to have a 'normal distribution'.

However in the township schools under study, the teacher/ pupil ratio is usually one teacher to 40 or 45 learners. Therefore, the results of the ANOVA were not deemed to be affected by the sample size.

Learners were split into two groups (boys and girls) and the analysis thus compared the three groups (boys, girls and teachers). The 10000 level was not computed because the learners were not tested at that level. The results are presented in Table 4.13.

Table 4.13: ANOVA results for Boys, Girls and Teacher (N=900)

Word Level		Sum of Squares	df	Mean Square	F	Sig.
2000	Between Groups	66566.278	2	33283.139	85.227	.000
	Within Groups	350298.000	897	390.522		
	Total	416864.278	899			
3000	Between Groups	52832.256	2	26416.128	116.702	.000
	Within Groups	203040.456	897	226.355		
	Total	255872.712	899			
5000	Between Groups	46200.466	2	23100.233	217.424	.000
	Within Groups	95301.877	897	106.245		
	Total	141502.342	899			
UWL	Between Groups	34335.003	2	17167.502	143.019	.000
	Within Groups	107672.668	897	120.036		
	Total	142007.671	899			

The ANOVA results indicate that in all the four levels there were significant differences between and within the groups, as shown by the $p < .000$ in all the levels. However, the levels of significance varied from one level to the next. The 2000 word level indicated that although

the difference within and between groups was significant with $F=85.227$, $p<.000$ it was smaller than at the 3000 word level with value $F=116.702$, $p<.000$. The significance at level the 5000 word level indicated the highest significance level among the four levels with $F=217.424$ $p<.000$ This could mean that the difference in means was also large between and within groups. To find out which groups differed significantly in all the levels a post hoc test in which a Tukey Honest Significant Difference (HSD) and a Bonferoni correction was applied was performed and results are presented in Table 4.14.

Table 4.14: Post hoc tests for boys,' girls' and teachers' means

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD 2000 level	Girl	Boy	4.85839*	1.33617	.001	1.7216	7.9952
		Teacher	-55.23029*	4.62304	.000	-66.0834	-44.3772
	Boy	Girl	-4.85839*	1.33617	.001	-7.9952	-1.7216
		Teacher	-60.08868*	4.63901	.000	-70.9792	-49.1981
	Teacher	Girl	55.23029*	4.62304	.000	44.3772	66.0834
		Boy	60.08868*	4.63901	.000	49.1981	70.9792
Bonferroni	Girl	Boy	4.85839*	1.33617	.001	1.6536	8.0632
		Teacher	-55.23029*	4.62304	.000	-66.3185	-44.1420
	Boy	Girl	-4.85839*	1.33617	.001	-8.0632	-1.6536
		Teacher	-60.08868*	4.63901	.000	-71.2152	-48.9621
	Teacher	Girl	55.23029*	4.62304	.000	44.1420	66.3185
		Boy	60.08868*	4.63901	.000	48.9621	71.2152
Tukey HSD 3000 level	Girl	Boy	2.13302	1.01726	.091	-.2551	4.5211
		Teacher	-51.81490*	3.51965	.000	-60.0777	-43.5521
	Boy	Girl	-2.13302	1.01726	.091	-4.5211	.2551
		Teacher	-53.94792*	3.53181	.000	-62.2392	-45.6566
	Teacher	Girl	51.81490*	3.51965	.000	43.5521	60.0777
		Boy	53.94792*	3.53181	.000	45.6566	62.2392
Bonferroni	Girl	Boy	2.13302	1.01726	.109	-.3069	4.5729
		Teacher	-51.81490*	3.51965	.000	-60.2567	-43.3731
	Boy	Girl	-2.13302	1.01726	.109	-4.5729	.3069
		Teacher	-53.94792*	3.53181	.000	-62.4189	-45.4769
	Teacher	Girl	51.81490*	3.51965	.000	43.3731	60.2567
		Boy	53.94792*	3.53181	.000	45.4769	62.4189
Tukey HSD 5000 level	Girl	Boy	3.50897*	.69694	.000	1.8728	5.1451
		Teacher	-46.75653*	2.41135	.000	-52.4174	-41.0956
	Boy	Girl	-3.50897*	.69694	.000	-5.1451	-1.8728
		Teacher	-50.26550*	2.41968	.000	-55.9459	-44.5851
	Teacher	Girl	46.75653*	2.41135	.000	41.0956	52.4174
		Boy	50.26550*	2.41968	.000	44.5851	55.9459
Bonferroni	Girl	Boy	3.50897*	.69694	.000	1.8374	5.1806
		Teacher	-46.75653*	2.41135	.000	-52.5401	-40.9730
	Boy	Girl	-3.50897*	.69694	.000	-5.1806	-1.8374

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
	Teacher	Teacher	-50.26550*	2.41968	.000	-56.0690	-44.4620
		Girl	46.75653*	2.41135	.000	40.9730	52.5401
	Boy	50.26550*	2.41968	.000	44.4620	56.0690	
Tukey HSD UWL	Girl	Boy	3.07273*	.74079	.000	1.3337	4.8118
		Teacher	-40.24471*	2.56308	.000	-46.2618	-34.2276
	Boy	Girl	-3.07273*	.74079	.000	-4.8118	-1.3337
		Teacher	-43.31744*	2.57193	.000	-49.3553	-37.2796
	Teacher	Girl	40.24471*	2.56308	.000	34.2276	46.2618
		Boy	43.31744*	2.57193	.000	37.2796	49.3553
Bonferroni	Girl	Boy	3.07273*	.74079	.000	1.2960	4.8495
		Teacher	-40.24471*	2.56308	.000	-46.3922	-34.0972
	Boy	Girl	-3.07273*	.74079	.000	-4.8495	-1.2960
		Teacher	-43.31744*	2.57193	.000	-49.4862	-37.1487
	Teacher	Girl	40.24471*	2.56308	.000	34.0972	46.3922
		Boy	43.31744*	2.57193	.000	37.1487	49.4862

The mean difference is significant at the 0.05 level.

The post hoc results indicated that at the 2000 level, while there are significant differences among the boys, girls and teachers, the level of significance was lower between the girls' and boys' mean difference ($MD=4.86, p<.001$) than between girls and teachers and between boys and teachers with ($MD -55.23$ and $-60.089, (p<.000)$ respectively. At the 3000 level there was no significant difference between boys and girls ($MD=2.133, p>.091$). The p value was more than .05 which means that the boys and the girls performed nearly the same. However, there was a significant difference between boys and teachers and between girls and teachers ($MD=53.81 p<.000$), and ($MD= 53.95, p<.000$). The results indicated that there were differences in the means among the groups in which a statistical significance of $p<.000$ was observed between the groups in all levels. However the level of significance varied as indicated in the mean differences between the groups. The UWL also indicated lower significance compared to other levels. For example, between girls and boys ($MD=3.07, p<.000$), between girls and teachers ($MD=40.24, p<.000$), between boys and teachers ($MD=43.32, p<.000$), and between teachers and boys ($MD=43.32, p<.000$), the results indicated that the differences in the mean scores among the groups at the UWL, is smaller than the differences in the mean scores among the same groups in the other word levels. The difference indicated that all groups found the UWL challenging and difficult.

The inferential tests thus confirmed that teachers' vocabulary level is low resulting in low proficiency in ESL.

The next section presents the results from learners' FAL exercise books.

4.4 Results from Learners FAL exercise books

Results from the learners' FAL workbooks serve to answer research questions 3 and 4. A total of five schools from the 16 schools that were tested were able to provide FAL exercise books for examination. The intention was to obtain at least two FAL exercise books from each of the 16 schools and examine them. However, some schools would not oblige for reasons that were not made clear. In total, 18 books were sampled for analysis from eight schools. The FAL books were examined to determine:

- What methods were used for teaching the selected vocabulary
- What levels of words learners were exposed to by their teachers
- What levels of words learners used in their own writing.

I will first discuss my conclusions for Research Question 3 (bullets 1 and 2 above), as drawn from the FAL exercise books and classroom observations.

To determine if vocabulary was taught, I selected extracts that required learners to explain meanings of words either from comprehension passages or from language structures such as synonyms and antonyms. Such activities provided teacher selected words. The nature of the activity also revealed much about the methods that the teachers used to teach the selected words. For example if learners gave dictionary meanings, I concluded that the teachers used the dictionary method for teaching the words. To determine the level of words that were selected for explicit instruction, I used an on-line vocabulary profiler created by Laufer and Nation (1995) to analyse the words at their correct levels. Finally, to determine the levels of words learners used in their own writing, I selected texts such as compositions, letters and diaries which learners produced independently. The texts (extracts) were transcribed into MSWord and uploaded onto a vocabulary profiler for analysis. The conclusions drawn in the sections that follow were also supplemented by my classroom observations, which may mean certain issues are highlighted more than once in the sections that follow.

4.4.1 Methods of word selection and teaching

An examination of learners' workbooks showed that vocabulary seemed to be taught sparingly. Most of the new words were introduced to learners through language structures

and were teacher selected. Language structures, for instance, synonyms, homophones and antonyms seemed to be main sources of new words. Some words were taken from comprehension passages in the DBE workbook and textbooks, in which unfamiliar words were highlighted for explicit instruction depending on the level of difficulty as determined by authors of the texts. In most comprehension activities, learners were asked to write the meaning of one or two words from the texts. They would explain the meaning of the words either by using their own words, a dictionary or by choosing the correct meaning of the word from given alternatives (multiple choice). This seemed to indicate that the methods that were used most during explicit instruction were teacher explanations and through use of dictionaries as was observed in language lessons observations – in such instances a maximum of five words were selected by the teacher and explained verbally or using a dictionary (only one instance). Learners explained two to three words in writing using the aforementioned methods. It also seemed that apart from selecting a few words for teaching, learners were exposed to the words in written format only once (instead of at least seven to 16 times in different contexts as recommended by research (Nation, 2001; Beck et al. 2013). Such practices result in superficial word learning. My lesson observations confirmed that teachers did not expose learners to the unfamiliar words multiple times. There was no evidence of writing the words several times in different contexts which led me to conclude that words were used only once, in written format.

In addition, the analysis of FAL workbooks also revealed that teachers employed activities such as multiple choice items, matching pairs of words, or fill-in the gaps to assess learner understanding of the meanings of the unfamiliar words. In the lessons observed, teachers used these types of questions to assess mastery of the new words. However it was not clear to what extent the words were mastered and retained for productive use by learners.

4.4.2. Levels of teacher selected words

Texts from learners' work were divided into two categories. The first sample sought to determine what level of words learners were exposed to in their classes by teachers. For this sample selected texts included sentences in which learners were asked to choose correct answers from given pairs of *homophones*, *homonyms*, *antonyms* and *synonyms* to complete given sentences. Teacher selected spelling words, comprehension questions from which learners generated answers as well as words which they used to teach different phonic sounds were selected. Written instructions on how to carry out certain tasks and how grammar rules

worked were also selected for this sample. The selected texts comprised 2821 words and were entered into a VocabProfiler designed by Laufer and Nation (1995) for analysis and producing a vocabulary profile. The vocabulary profile for the selected texts is presented in Table 4.15

Table 4.15: A Vocabulary Profile (VP) output for teacher provided words

Level	Number of words	Percentage (%)
1000 Level	2072	73.45
2000 Level	280	9.93
UWL	54	1.91
Off-List Words	415	14.71
Total	2821	100

The analysis of the 2821 words shows that most of the words that the teacher exposed learners to were at the 1000 word level (73.45%), a percentage slightly higher than what a native speaker would use in communication (Laufer & Nation (1995). Nation & Laufer (1995) suggest that the ideal distribution of words in a native speaker's written text is that 70% of the words should come from the 1000 frequency level, 10% from the 2000 frequency level, 10% from the UWL and 10% from the Off list category. Use of more than 70% that is recommended at the 1000 word level signifies lack of linguistic competence (Tanaka, 2012). Table 16 also shows that learners were exposed to 9.93% of words at the 2000 word level which is close to recommended 10%. It means that learners were exposed to fewer words from the 2000 word level than would be recommended at Grade 6 level. According to Nation (2001) teachers should focus on teaching the 2000 frequency level as these are high frequency words that learners need to know to conduct basic communication and also to access lower frequency words in the other word levels through reading. This means that more than 10% of words at the 2000 level should be taught to learners.

In addition, the analysis shows that there were a very small proportion of academic words in the extract (UWL- 1.91%). It seems that teachers did not use scientific texts which might result in learners encountering more academic vocabulary. However, there were 14.7% off-list words. The Off-list categories comprise words that are at higher levels and not in the 1000 and 2000 word levels. This percentage is much higher than is recommended by Laufer and Nation (1995). Although teaching these words helps to enhance receptive vocabulary

growth some research discourages explicit instruction of such words since learners are unlikely to use such words or meet them many times in their reading.

4.4.3 Levels of words used in learners' writing

The second sample from the FAL workbooks comprised learners' own productive use of words in their written work. This included descriptive and narrative compositions, diaries, letters and sentences which learners constructed independently. Although learners' descriptive paragraphs made use of free productive vocabulary, the assumption was that since all exercises were guided written work, the sample could still be classified as controlled production. A vocabProfiler was used to sort the words from the combined samples into their respective frequency levels as show in Table 4.16. This total sample comprised 3897 words.

Table 4.16: A Vocabulary Profile (VP) output for Learners' written work

Levels	Number of words	Percentage (%)
1000	3365	86.35
2000	258	6.62
UWL	38	0.98
Off-List Words	236	6.06
Total	3897	100

The analysis of the sample indicates that 86.35% of the words used are from the 1000 frequency level and is higher than the 70% recommended by Nation (2001) and also higher than the 73.45% of the teacher-provided words from the first sample (see Table 4.16). The results indicate that learners vocabulary comprise mainly of words at the 1000 word level. Learners do not need explicit instruction to master words at the 1000 word level (Laufer 1990) as they are composed of function words and common words of very high frequency. If learners at Grade 6 have only mastered the 1000 level words, the implication is that they find general communication difficult let alone reading. The number of words used from the 2000 word level was also small (6.62%) compared to the 10% recommended by Nation (2001). The percentage indicates that learners' productive vocabulary at the 2000 level is a cause for concern (250 words out of 1000 in the entire written sample). The results closely match the PVLТ results of 288 known words at the 2000 word level (see Figure 4.2).

The UWL with the use of 0.98% indicates that learners had limited exposure to academic words and off list words as confirmed by their poor performance in the 3000, 5000 and UWL

levels in the PVLТ. The poor performance in the PVLТ 2000 level and indeed, in all other levels, indicates that most learners' vocabulary is at the 1000 level which is in all probability the reason for their low mean score in the 2000 level (M=28.8%) (see Table 4.2). The results of the analysis of both written samples confirm that learners have a poor vocabulary overall. It therefore means that the PVLТ results for the learners match learners' use of vocabulary as shown by frequency profiles from both the teacher provided and the learner produced texts.

4.5 Results from lesson observations

This section serves to answer research question 3 and 4 as does section 4.4 as outlined in the introduction of this chapter (see § 4.0). Eight teachers from five schools that were sampled from the 16 schools in the district were observed teaching lessons of their choice. Five of them taught English FAL lessons while three taught content subjects. Of the three who taught content subjects, two taught Natural Science while one of them taught Mathematics. I will discuss observations made under three subheadings, namely vocabulary selection, vocabulary teaching methods and vocabulary assessment methods because these subheadings are the core aspects of a lesson.

4.5.1 Vocabulary selection in language lessons

An analysis of the language lessons revealed that all the teachers taught vocabulary but with varying degrees of emphasis and ability. Varied methods were used to select words that were deemed unfamiliar to learners.

In FAL lessons all the observed teachers identified unfamiliar words for the learners for explicit instruction. Three of the five FAL teachers wrote the selected words on the chalkboard. This practice indicated lesson preparation and showed an understanding that vocabulary knowledge is important in understanding concepts. Two of the teachers identified the words during the course of the lessons but did not write them on the chalkboard for learners to view and read, meaning that the learners' word recognition skills were not developed. Research indicates that words that are written down - be it on the chalkboard or on charts - improve word recognition skills so that the words eventually become part of learners' sight vocabulary (Nation, 2001; Beck et al., 2013).

The teachers seemed to select words they assumed to be unfamiliar to the learners. Some of the words were highlighted for explicit instruction by the authors of the text-books used in

class. Only one teacher prompted learners to identify further words they did not understand in addition to the words selected by the teacher. Teachers who taught comprehension usually selected a maximum of five words. It was clear that the teachers were concerned more with the comprehension of the passages and language structures than individual word learning. Research indicates that depending on text difficulty, teachers should focus on words that are important for the understanding of the text and also words that are conceptually difficult (Beck et al., 2013). In the lessons that were observed, it seemed that teachers selected words that assisted learners in understanding the texts and words that were not used in learners' everyday lives. Word learning thus did not seem of primary importance to the teachers. It also seemed that the teachers did not choose the words with the 2000 level words in mind since some of the words observed in lessons were 1000 levels words.

4.5.2 Vocabulary selection in content subjects

The purpose of observing content subjects lessons was to find out how vocabulary was treated in the content subject areas - if at all and what levels of words are taught. The general assumption is that content subjects provide much needed academic vocabulary. They concentrate on teaching subject-specific vocabulary leaving generalized vocabulary to FAL teachers. This practice has a negative consequence on the holistic development of vocabulary in learners who need to come into contact with words in different contexts so as to be able to use them productively.

It was clear that as in the language classes, teachers selected words which they assumed learners did not know. Teachers decided for the learners which words were important in the lesson and did not ask learners to indicate words they did not understand. An interesting observation was that content subject teachers, especially the Natural Science teachers, did not select general vocabulary for explicit instruction but focused only on specialized vocabulary. It means that generalized vocabulary is assumed to be taught by the FAL teachers. The word-selection included only the subject specific vocabulary such as *carnivorous*, *omnivorous*, *herbivorous*, to mention a few. The words selected by the Mathematics teacher included *greater than*, *less than*, *equal* and *compare*. The practice of focusing only on subject-specific vocabulary has a negative impact on vocabulary development as the 2000 level words learners do not understand are not developed.

Teachers who taught content subjects generally selected between four and ten words. The Teacher who taught Natural Science selected more words (eight to ten words) than the teacher who taught mathematics (four words). Compared with FAL teachers who selected between two and five words, it is clear that content-subjects teachers exposed learners to more words in a single lesson.

4.5.3 General approach to vocabulary teaching

Classroom observations revealed that the most common method of teaching was **teacher explanation** of words in context. **Synonyms** were also used, as well as **antonyms**, although only in a few instances. The mathematics teacher used objects to illustrate the concept of comparison. Additionally, one of the Natural science teachers used the **glossary** at the end of the textbook while the other tried to use the **dictionary**. The glossary section focused on subject specific words with no reference to VLT level words. Dictionary use was not very successful as learners were slow to find words in their dictionaries revealing that learners lacked dictionary skills. The fact that only four dictionaries were available in the classroom also indicated that use of the dictionary is not common practice in this classroom and also left learners without a means of finding definitions.

In addition, one of the FAL teachers who taught homophones (*Look alike and sounds alike*) asked learners to look up the words *patience/patients* and *patient/patient* from the dictionary to explain the meanings of the words *patient* (*noun*) in one sentence and *patient* (*adjective*) in another sentence. Although the words were contextualized, learners were not able to distinguish between the noun and the adjective. It was therefore difficult for them to determine the appropriate meaning according to the context of the words in question. Furthermore, learners struggled to locate the words in the dictionary. None of them tried to use headwords to find the words. The teacher had to give learners the page number to help them locate the words. Again very few dictionaries were available in the classroom, hence learners lacked dictionary skills and the opportunity to practise the skill.

The observations also showed that lessons were dominated by **teacher talk**, a teacher-centred approach, with learners playing a rather passive role in the learning process. Learners did not have enough opportunities to use new words productively in the classroom situation. This made it difficult to assess whether words taught were mastered and whether learners were able to use them in speaking or in writing. In other cases, teachers used **mother tongue**

translation to explain some of the words. Mother tongue translation was used by nearly all teachers, especially the teacher who delivered a lesson on *homonyms*. While learners seemed to understand the differences between the words, they needed to hear the teacher modelling the use of the words in the AL and they also needed to practice using the words in the AL. Most learners were at liberty to use their mother tongue during the lessons especially when they did not understand instructions. The result was that FAL acquisition was affected because learners lacked practice in speaking in the AL.

One teacher who was observed teaching *Language structures- singular* added one vocabulary question and asked learners to give meanings of the words *grandmother* and *screeched*. The words had no clear source and were not contextualized. Learners therefore went on to add *-s* in front of the words following the instruction that was given at the beginning of the lesson. Learners had not understood what they were required to do in that vocabulary question.

4.5.4 Vocabulary assessment methods

In assessing whether learners had mastered the vocabulary that was taught, teachers asked very few questions about meanings of words. Most questions in reading comprehension focused on the understanding of the plot and characters in the stories and learners answered literal and inference type questions. An analysis of the number of words that required learners to give meanings in all the activities showed that a maximum of four questions on vocabulary were asked in written activities where learners were required either to explain the meanings of vocabulary in their own words, match a word with a correct sentence or phrase (the most popular method) or fill a blank with a correct word. In other words, receptive knowledge was tested more than productive knowledge of a word.

In one observation, two FAL teachers asked two vocabulary questions each that required learners to use dictionaries to find meanings. Zhong (2011) contends that teachers need to improve learners' productive vocabulary knowledge through use of productive vocabulary tasks that lead to the development of both receptive and productive vocabulary knowledge. Some of the tasks that were given to learners did not contribute much to vocabulary learning. It was thus concluded that in the study classrooms, vocabulary teaching was at the periphery of AL learning and that dictionary usage is minimal.

4.5.5 Levels of taught words

Table 4.17 provides a vocabulary profile of the words that were selected by all eight teachers who were observed teaching. The words used in my analysis were copied from blackboards in classrooms.

Table 4.17: Profile of words selected by teachers for explicit instruction

Level	Percentage %
1000	34.92
2000	22.22
UWL	9.52
Off-list words	33.33

All the words that teachers selected for explicit instruction were copied and run through the VocabProfiler. The results show that a large percentage (34.9%) of taught words belong to the 1000 word level. According to Nation (2001) words that are taught explicitly should be 2000 word level words because most of the running words in a text come from this level. Also, words at this level are crucial for everyday basic communication. It is not necessary to explicitly teach words at the 1000 word level as these words can be learnt without explicit instruction. Teachers' inadequate selection of words could be a contributing factor in explaining why participating learners used words at the 1000 level in their own writing and also why they have not yet adequately mastered words at the 2000 level (22.2%). The Off-list category which comprises mostly words at the 3000, 5000 and 10000 word levels shows a large percentage (33.3%) indicating that teachers focused on teaching words in the Off-list category. Research (Laufer, 1995, Laufer & Nation, 1999) indicates that while the 3000, 5000 and 10000 level words enhance comprehension, they should not be the main focus in teaching vocabulary because learners do not encounter these words often in everyday communication and cannot use these words productively in general communication. Teachers' word selection therefore has consequences for FAL learners' vocabulary development.

The results of the classroom observations underscore the results of the PVLТ (see § 4.2 Table 4.3). While vocabulary was taught in this study schools in this district, it is not emphasized to the extent that it results in learners developing sufficient receptive vocabulary that can be transformed into productive vocabulary. Although teachers were aware that vocabulary should be taught, the lesson observations revealed that teachers were not aware of the

important role vocabulary knowledge plays in comprehension and indeed in academic achievement. Moreover, they were not adequately equipped with the skills and knowledge of vocabulary teaching. Therefore, vocabulary did not receive the attention it deserves in FAL classes.

4.6 Results from the interviews

To supplement my classroom observations in answering **research question 3**, a semi-structured interview was conducted with eight teachers from five participating schools (the same teachers whose classes were observed). The interview focused on five main aspects, namely (1) the Curriculum and Assessment Policy Statement (CAPS) and vocabulary teaching, (2) word selection methods, (3) vocabulary teaching methods, (4) vocabulary assessment methods, and (5) teachers' opinions on vocabulary teaching. There are several reasons for focusing on the mentioned issues. Firstly, CAPS outlines the FAL syllabus that should be taught to learners and also outlines how the syllabus should be delivered to learners. It further states how important the different aspects of the Additional Language are in learning the language. It is therefore important that teachers know about CAPS so that they teach all aspects outlined by the policy and also teach within the boundaries of the policy.

Secondly, the issue of methods of teaching is fundamental to teaching and learning. Therefore, it is important that effective methods for vocabulary learning are put into practice. The CAPS policy highlights the methods that teachers should use so that acquisition of vocabulary takes place. This interview, in part, sought to find out if these recommended methods were being used.

Thirdly, vocabulary teaching at Grade 6 should focus on particular frequency levels of words so that learners develop the necessary Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) which will prepare them for academic challenges in higher grades. It is therefore important that words that are selected for explicit instruction are from the 2000 word level since most of the running words in a text come from this level as well as the UWL. In this study it was assumed that the 1000 word level was known to learners since it comprises function words and very basic content words.

Finally, I sought to find out teachers' opinion with regards to vocabulary teaching. Both teacher and learner attitudes are important if effective teaching and learning respectively is to take place in the AL classroom. Zhong (2011) cites needs and motivation as personal factors

that influence vocabulary learning. Teachers who are motivated teach better than teachers who are not motivated. Learners who are also motivated to learn the AL will have positive attitudes towards vocabulary learning (Mukundan, Baki & Ayub 2012)

4.6.1 CAPS and vocabulary teaching

From the interviews it seems that some of the teachers were not very familiar with the CAPS policy. The knowledge they had of the policy was acquired through lesson plans and work schedules provided by the Department of Basic Education. Five of the eight teachers indicated that they had never seen the CAPS document. They indicated that through lesson plans they were aware that vocabulary should be taught. However, those who had read the policy indicated that the policy stated in very short statements that vocabulary should be taught but did not indicate what category of words should be taught in terms of levels. They all indicated that they did not know about the word frequency levels. However, they all knew that learners should acquire knowledge of high frequency words which some teachers referred to as sight words. In addition, they knew that learners should be taught ‘unfamiliar’ words. It seemed therefore that while CAPS advocates for the teaching of vocabulary, efforts to teach vocabulary seem to be minimal, mostly because teachers find the policy lacking in detail about word levels and exactly which vocabulary should be taught and how to do so.

On the number of words Grade 6 learners should know, all teachers indicated that they did not know the number of words that Grade 6 learners should know by the beginning and end of Grade 6. Moreover, the teachers indicated that, considering the township background of learners the number of words that Grade 6 learners should know according to CAPS (3000 words at the beginning of Grade 6 and 5000 words by the end of Grade 6) is unattainable. Teachers argued that learners only come into contact with the AL in the classroom and outside the classroom and at home they speak their mother tongue. In addition, at the beginning of Grade 6, their vocabulary is far below what they are expected to have acquired. Two teachers revealed that some teachers use their mother tongue in the classroom to teach all subjects including the AL. It seems that even in Language classes translation from mother tongue to AL is an entrenched practice. Teachers are expected to model the use of the AL so that learners learn from them.

Six out of eight teachers revealed that most of their learners are not independent readers in either the L1 or the AL. Most learners read at frustration levels and cannot acquire the 3000

words expected of them at the beginning of Grade 6. Therefore they cannot acquire AL vocabulary outside the classroom because most of them do not read or speak the AL outside the classroom. All these factors impact on AL development among learners, specifically vocabulary development. It is therefore difficult for teachers to realize the vocabulary size mentioned in the CAPS document.

Teachers further expressed concern about the expectations of the Department of Basic Education regarding vocabulary development and articulated that AL development depends on the location of the school and on the calibre of teachers. Most teachers in independent schools are student teachers who are still studying at various institutions and lack teaching experience. There are few to no meaningful workshops that teach these teachers how to deliver lessons in the classroom. Furthermore, teachers indicated that independent schools are not given teaching materials such as the DBE workbooks and charts that are given to public schools, yet they are expected to teach according to the CAPS policy. Such factors affect AL development in the township schools.

Teachers also indicated that learners do not read challenging texts from which they can come into contact with academic words and blamed the lack of the UWL knowledge on the simplified FAL textbooks which are used to teach the learners. One teacher argued that the simplified FAL text books do not contain words that can enhance learners' vocabulary. The teacher reiterated that learners' vocabulary cannot grow from nothing because most of the FAL textbooks do not contain the vocabulary that can equip learners with the needed 3000, 5000 and UWL words. Another teacher blamed some content subject teachers who use mother tongue to teach and explain scientific concepts to learners. Use of mother tongue for content subject teaching has negative consequences for learners' vocabulary development.

Another interesting finding from the interviews conducted with some of the teachers revealed that CAPS allocated one period of reading per week (2 hours 30 minutes) for the grade six classes. Reading is fundamental in understanding of concepts and for vocabulary development. Many new words are encountered during reading. Moreover, reading allows words to be taught in context. However, most teachers do not know how to teach reading and vocabulary. They also do not know how to assess reading as well as vocabulary. As a result, it is not surprising that after spending six years of schooling, most learners in the study read at frustration level (Pretorius 2005) and because they cannot read well they have not mastered the 2000 word level.

4.6.2 Word selection

The interview confirmed what I observed in most classes, namely that words that are taught are selected from texts such as narratives, poems and expository scientific texts taken from prescribed textbooks. Teachers select words they think will be difficult for the learners, and in very rare cases learners are asked to indicate words that are difficult for them. Some words are taught as language structures, for example, when teachers are required to teach synonyms, antonyms or adjectives, they find words that will facilitate the teaching of that concept - which in some cases is done out of context. Two teachers indicated that from their teaching experience, they know which words are difficult and require explicit instruction especially when teaching language structures such as synonyms, homophones and antonyms, while five teachers indicated that textbooks usually highlight words that should be taught explicitly - albeit without specifying what teaching methods should be used. The number of words teachers selected seemed to depend on text difficulty, but generally not more than five new words were taught in any given lesson. Science teachers said that most topics could have as many as 10 new specialized words per lesson which meant they had to teach all 10 words in a single lesson which learners often found overwhelming.

4.6.3 Vocabulary teaching methods

Although CAPS recommends dictionary use with emphasis on teaching words in context, five teachers said that they desist from over-reliance on the dictionary and prefer inference from the text context instead. Their argument was that dictionary use was distracting especially when learners needed to read extensively and when writing tests where dictionaries were not used. However some teachers added that they used synonyms and antonyms to teach unfamiliar vocabulary. None of the teachers used other vocabulary teaching methods such as the keyword method or word maps. Teachers also revealed that most learners had problems with the use of dictionaries such as not being able to use headwords to locate words. Other learners were not able to contextualize meanings provided in the dictionary especially where multiple meanings for a word are given. Grade 6 teachers blamed Grade 4 and 5 teachers for not teaching learners dictionary skills.

The interviews with teachers also revealed that teachers lack teaching methods and knowledge of vocabulary teaching strategies as observed during lesson observation. Teachers do not know how to teach reading and vocabulary. Most of the teachers who were

interviewed and observed teaching rely on verbal explanations and on superficial use of the dictionary to teach meanings of words resulting in superficial word learning.

Although workshops are conducted regularly in the district, teachers revealed that the workshops do not effectively teach them methods of teaching. They are usually given handouts which are not effective in teaching them how to teach. One teacher, who is in the process of acquiring a degree in teaching, said that she was visited once only through her entire course by a supervisor from one of the universities who observed her teaching one language lesson and gave her a very good mark for that lesson. However, the once-off feedback she received from the supervisor was not enough to prepare her for a full-time teaching profession and did not focus on specific teaching methods. The 'one lesson' observation has consequences for teachers' classroom practice during training and it reflects badly on teacher training programmes. Teachers on training need an intensively supervised practical teaching practice so as to learn all the skills needed in the teaching field to be competent in the classroom. A well planned theory and practical experience during training will produce adequately trained teachers.

4.6.4 Vocabulary assessment methods

Vocabulary assessments as revealed by interviewed teachers comprised exercises such as matching a word with the correct meaning, multiple choice questions (MCQs) where a statement was given and learners chose answers from given alternatives. Occasionally learners were asked to explain the meanings of words using their own words. From the assessments of matching the correct meaning with the word and MCQs, the vocabulary assessments reveal that learners experience surface learning of the word where only memorization is required as opposed to deep learning of the word where learners have to be cognitively involved with the word. It means therefore that explicit vocabulary instruction is only carried out superficially and the focus of assessment of vocabulary is more on receptive than productive use of words.

The interviews also revealed that teachers do not know how to assess vocabulary and reading. Vocabulary assessment is important for identifying children at risk for reading (Meara and Fitzpatrick 2000). Teachers need to know their children's problems so as to prepare appropriate instructional material that will improve their vocabulary knowledge and improve their reading competency. The NRP (2000) identifies vocabulary as one of the components

that are essential in teaching children to read. Knowledge of how to assess vocabulary helps in teaching the aspect successfully and this component is lacking among teachers in this district.

4.6.5 Teachers' opinion of vocabulary teaching

From the interviews, it seemed that teachers felt that the CAPS does not put enough emphasis on vocabulary teaching as it does with other aspects of language such as the teaching of language structures, nor are specific guidelines provided on how to teach vocabulary. Teachers' superficial treatment of vocabulary as evidenced from my observations seems to be regulated by their belief that the CAPS does not emphasize vocabulary teaching sufficiently, and as discussed in the previous sections, by their lack of knowledge about the importance of teaching vocabulary, and their lack of knowledge about vocabulary teaching methods. Indeed, in the ANA tests, very few questions are asked on the meanings of words taken from comprehension passages. In addition, the vocabulary questions are in multiple choice format which means learners can guess the correct answers. Because of a lack of specific detail about vocabulary teaching in CAPS and what seems to be negative washback from the ANA tests, teachers felt that it was worth spending time teaching other aspects of language rather than teaching vocabulary.

4.7 Conclusions from the findings - answering the research questions

From the literature reviewed in chapter 2, it is clear that vocabulary knowledge plays a pivotal role in language learning and it is an indispensable part of literacy development. Researchers contend that vocabulary provides the building blocks of a language (Sedita, 2005; Moghadam, Zainal & Ghaderpour, 2012; Sidek & Rahim, 2015) and that knowledge of vocabulary results in the development of Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) which are both needed by learners and teachers to operate proficiently in the learning and teaching environment (Cummins 1980). However, results from the teachers' and learners' PVL and learners' writing, indicate that both learners and teachers have low vocabulary sizes which impact on their BICS and CALP. I will now briefly discuss the Research Questions in view of the findings.

Research question 1 states: *What is the productive vocabulary size of township school learners as measured by the PVLVT?*

The mean scores obtained by learners in the 2000, 3000, 5000 and the UWL clearly indicate that learners have a small vocabulary size in all the levels. At the 2000 word level learners scored a mean of 28.8% which indicates they have not mastered the most crucial 2000 words which comprise 80% of any text. Knowledge of words in this level enables ESL learners to conduct basic communication (BICS). According to Cummins (1980), it takes about 2-3 years for learners to develop the BICS from the first time they are exposed to the AL. The learners in this study had completed six years of learning the AL but had not mastered the vocabulary that should enable basic communication and CALP.

Therefore, the hypothesis which states that *the majority of learners in the township schools used in this study have a small productive vocabulary which is below the level required for academic success at their grade level* is proven to be true.

There are several reasons that could explain learners' low mean in the 2000 level. Firstly, learners in this study come from disadvantaged backgrounds. The township area described in chapter 3 is characterized by high levels of poverty and unemployment. Pretorius and Lephhalala (2011) contend that poverty is one of the strongest factors that affect general literacy development amongst learners. Given the low socioeconomic background of most learners, it is a safe assumption that learners are not exposed to print-based material from a young age or on a regular basis at home. Most parents and guardians cannot afford to buy books for their children. The lack of print-based materials in the home impacts on the development of emergent literacy skills in children, which in turn affects children's later academic development (and interest in reading).

Most children in the study come from backgrounds where parents do not read them storybooks, which further contribute to their limited schemas in English. Teachers who were interviewed also confirmed that some parents and especially grandparents who are caregivers are illiterate and have problems assisting their children with homework which indicates that reading at home is not promoted. Cohen and Johnson (2010) argue that vocabulary acquired in the first grade is a stronger predictor of academic success in the 11th grade than when vocabulary is acquired when the child is older. Learners in this study clearly did not achieve adequate vocabulary levels in the grades preceding Grade 6.

Secondly, learners' poor PVLТ results could be because schools in this district are poorly resourced. They do not have libraries. Stanovich's (1986) Matthew effect theory states that learners who do not read well do not read and eventually lose the little vocabulary they have acquired. Learners in this study lack a reading culture due to a lack of libraries in the schools and print material in the home. Although there are community libraries, teachers who were interviewed revealed that learners did not make use of these facilities due to lack of encouragement from both teachers and parents. Learners therefore do not engage in extensive reading from which they can develop a reading culture.

Finally, the language of instruction used in the classroom is another factor that seems to affect vocabulary development. Research reveals that language develops from use (Nation 2001) and since vocabulary forms the building blocks of language it should be developed through practice. In most classrooms in this study especially in the public schools, teaching is conducted in the mother tongue even in AL classes. Policy states that mother tongue instruction should be used in Grades 1 and 2 and English should be slowly introduced in Grade 3 and used as a LoLT from Grade 3 onwards. However, that is not the case in the study district, as revealed by some of the teachers who were interviewed. Mother tongue instruction continues through all grades at primary school and this practice impacts on learners' BICS and CALP in the FAL. Vocabulary development in the FAL (English) is thus impeded in the process.

Research question 2 states: *What is the productive vocabulary size of the township school teachers as measured by the PVLТ?*

The teachers' PVLТ results revealed that the mean scores in all the levels are higher than the means of learners, which was to be expected. At the 2000 level teachers' mean score was 86.3%. While this may seem like an achievement, Nation (2001) argues that less than 90% of the knowledge of words at this level results in limited development of conversational language namely, BICS. That could explain why most teachers use mother tongue (MT) instruction in the classroom. At the 3000, 5000 and UWL as well as the 10000 levels teachers scored very low means. Teachers' scores at these four levels with 69%, 57%, 51% and 33% respectively were lower than expected and below the 90% recommended by Nation (2001). Adequate knowledge of words at these levels results in increased comprehension, and knowledge of the UWL contributes to the development of CALP. However in this case the low means obtained by teachers in the rest of the levels indicate that teachers' CALP may be

somewhat limited. Research indicates that vocabulary correlates with language proficiency (Meara and Fitzpatrick 2000; Nation 2001). If teachers' vocabulary knowledge is limited it follows that their English language competency in the classroom will also be limited and could contribute to the poor results obtained by learners in the PVLТ.

The hypothesis that most teachers in the participating township schools have a small productive vocabulary which impacts on their teaching is, therefore, confirmed.

Research question 3 states: *What kind of vocabulary instruction takes place in Grade 6 township schools?*

From lesson observations and interviews, it became apparent that the most commonly used method of vocabulary instruction is teacher explanation combined with limited dictionary use. Occasionally synonyms and antonyms were used. Teachers revealed that vocabulary teaching was not something they attached much importance to hence it was not emphasized like other FAL aspects. Most of the teachers who participated in the study, did not know how to deliver lessons effectively in the classroom.

Some teachers did not teach vocabulary at all. Observations seemed to indicate that teachers were paying lip service to vocabulary teaching and did not know about methods of vocabulary teaching. As far as teacher assistance goes, the CAPS spells out what aspect of FAL should be taught at Grade 6. However, the policy does not give guidance to teachers on how vocabulary in the curriculum should be taught. The CAPS only states that vocabulary should be taught in context. Since most teachers in South Africa are not adequately trained to teach in English (Jordaan, 2012) it seems clear that vocabulary instruction continues to be neglected. All the above mentioned factors contribute to an ineffective level of vocabulary instruction taking place in the participating schools.

Research question 4 states: *What percentage of words at the different VLT levels do learners use in their writing?*

To answer this research question, it is important to highlight what Nation (2001) declares to be the ideal vocabulary profile of a text that is produced by a native speaker. A native speaker produces a profile with 70% of words at the 1000 level, 10% of words at the 2000 level, 10% of the words at the UWL and 10% words at the Off-list category (Nation 2001). A competent ESL learner's text should have vocabulary levels that are close to a native speaker's profile.

The profile that was obtained from learners' written work (see § 4.4.1 Table 17) revealed that the percentage of words they used at the 1000 level was 86.4% which is much higher than the 70% of a native speaker's text. Results indicate that the bulk of learners' vocabulary is composed of many function words and simple content words which do not give learners linguistic competence.

At the 3000 and 5000 levels, which help readers to increase comprehension, learners scored much lower than Nation's (2001) proposed 10%. The UWL scores also indicate that learners have not mastered much vocabulary at that level. Meara and Fitzpatrick (2000) contend that a learner who has linguistic competence in both spoken and written language must use a high percentage of low-frequency words. Staehr (2008) contends that vocabulary size, particularly productive vocabulary knowledge, determines lexical sophistication in learners' writing giving it a measure of quality. In this study, the opposite seems to be true. Since the 1000 word level dominated the written (productive) vocabulary size of learners, it was clear that learners had not acquired the level of English vocabulary that is required for effective academic achievement at their grade level.

4.8 Conclusion

In conclusion, this chapter explored the vocabulary size of learners and teachers at different frequency levels as measured by the PVLTs. It also presented the total vocabulary means for individual schools as measured by the PVLt. The chapter also presented and discussed inferential statistics in which the independent sample t-test the ANOVAs and the Post hoc tests for learners and teachers were computed. Results from the learners' FAL exercise books, classroom lesson observations and interviews were presented and triangulated with the PVLt results. Finally, a discussion of the main findings was presented and the chapter closed with a conclusion.

The next chapter will briefly summarise the main findings of the study, and the aims and objectives of the study will be reviewed. The study's contributions and limitations will be described and recommendations for future research regarding productive vocabulary will be made.

CHAPTER 5

CONCLUSION

5.0 Introduction

In this final chapter of the study, I will restate the purpose and aims of the study as they relate to the research questions and hypotheses. As each research question is examined, a brief summary of its findings will be presented. Thereafter, significance and limitations of the study will briefly be discussed. Finally, suggestions for future research which emerge from the study will be made.

5.1 Restatement of the aims of the study

The aims of the study as stated in chapter 1 (see §1.4) are:

- To measure the productive vocabulary size of Grade 6 learners in township schools using a Productive Vocabulary Levels Test
- To measure the productive vocabulary size of teachers in township schools using a Productive Vocabulary Levels Test
- To investigate existing methods and strategies used by teachers in teaching vocabulary
- To determine the types and levels of words that Grade 6 learners use in their writing.

The first aim of the study endeavoured to measure the productive vocabulary size of Grade 6 learners in township schools using a Productive Vocabulary Levels Test. Eight hundred and eighty one learners from 16 schools participated in the study. Learners were tested using the PVLT (version C) which comprises the 2000, 3000 5000 and the UWL word levels.

The second aim was to measure the productive vocabulary size of teachers in township schools using a Productive Vocabulary Levels Test. Teachers were of interest in this study since they are the vehicle through which knowledge is transmitted to learners. Teachers require a sound vocabulary also in order to help their learners develop sufficient vocabulary essential for academic success (Nel and Muller 2010). To this end, 19 teachers were administered the CPVLT (version A) created by Laufer and Nation (1999). The test comprised the 2000, 3000, 5000, UWL and 10000 word levels.

The third aim of this study was to investigate existing methods and strategies used by teachers in vocabulary teaching. A structured interview and classroom observations were used to collect data in addressing this aim.

The fourth and final aim was to determine the types and levels of words that Grade 6 learners use in their writing. Data were collected from a sample of learners FAL classwork books. Two types of texts were used to compile text files for analysis in a VocabProfiler. The first text type comprised creative writing exercises such as compositions of various types and letters and the second text type consisted of general written work, such as sentences provided by teachers for learners to underline certain words, spelling words, words selected from passages and dictation texts. The online Vocabprofiler was used to group the words from both text type samples into their respective VLT levels.

5.2 Summary and discussion of the main findings

The purpose of this section is to present a summary of the main findings of the study as revealed by the four research questions (see § 1.6.1).

5.2.1 Research question 1

What is the productive vocabulary size of the Grade 6 township schools learners as measured by the Productive Vocabulary Level Test?

Learners vocabulary was measured at the 2000, 3000, 5000 and UWL and 10000 word levels. Generally learners' vocabulary size at the 2000 word level was very small with a mean score of 28.8%, indicating that the majority of learners had not mastered vocabulary at the 2000 word level (see § 4.2 Table 3). In fact, quite a number of learners scored zero at this level, with only a few (35 learners out of 881) managing to score between 66.7% and 94.4%. Learners' scores at the 3000 word level were even poorer, with a mean score of 16.2%. As discussed in chapter 2, the 3000 level is crucial for reading authentic texts (Nation 2001), and 95% coverage of words in academic texts is needed for minimum comprehension - this means a threshold of 3000 to 5000 word families is needed to read with minimum comprehension (Laufer 1997; Schmitt et al. 2001).

The mean scores at the 5000 word level and the UWL followed the same trend as for the 2000 and 3000 word levels. The participating learners obtained a mean score of 8.7% at the

5000 word level and 9.5% for the UWL respectively (see § 4.2 *Table 3*). Both sets of results indicate that learners had not mastered vocabulary at these levels.

In short, the learners' vocabulary levels were disturbingly low at all levels. The 2000 word level is considered the most crucial for basic everyday communication (Nation, 2001) and learners who possess only words at the 2000 word level would be deemed poor readers (Schmitt et al. (2011)). The mean percentage of 28.8% at the 2000 word level paints a particularly worrying picture about the tested Grade 6 learners' vocabulary levels in the FAL especially, at a point in their schooling when their academic reading load is continually increasing. It is fair to assume that most of the learners would struggle to communicate effectively in the additional language and have reading and comprehension problems. Learners' low scores at the 3000 and 5000 word level means they lack sufficient vocabulary for adequate comprehension of the type of texts they are required to read at their grade level. Their low scores in the UWL indicate that they would struggle to read basic academic texts.

5.2.2 Research question 2

What is the productive vocabulary size of the teachers in township schools as measured by the Productive Vocabulary Level Test?

Nineteen teachers were tested with version A of the PVLТ which included the 2000, 3000, 5000, UWL and 10 000 word levels. Five teachers scored 100% and two scored 94% at the 2000 word level, whilst the remaining teachers scored between 55.5% and 89%. According to Nation (2001) a score of less than 90% at the 2000 word level implies a user will struggle with even basic communication in the AL, let alone *teaching* in the AL.

Teachers' scores at the 3000, 5000, UWL and 10000 word levels were equally concerning. At the 3000 word level, one teacher scored 100%, and one scored 94%. All other teachers scored between 61% and 89%. This means at least 17 of them would find reading authentic texts difficult, a situation that is of grave concern.

At the at the 5000 word level, with a mean score of 57%, one teacher scored 100% followed by one who scored 89%. The rest of the teachers scored between 83% and as low as 22%. When one considers that knowledge of the 5000 word level is needed for enhanced comprehension (Laufer & Nation 1999; Schmitt et al. 2001; Nation 2001, Beck et al 2013),

these scores imply that the tested teachers in all probability struggle with comprehension of texts themselves – teaching comprehension would, therefore, be even more difficult.

Teachers are expected to have adequate knowledge (90% and above) of words at the UWL level since the academic nature of the words at this level is required to translate and transmit knowledge to learners from textbooks. However, the highest score obtained by one teacher was 94% followed by 78% and the lowest score being 0%. This means that except for one teacher, the teachers' academic vocabulary knowledge is cause for concern since their scores indicate they will have difficulty handling academic texts. The scores also indicate that teachers know very little academic vocabulary and this has implications in teaching both the AL and content subjects.

At the 10000 word level teachers scored between 78% and 11%. The 10000 word, level like the 5000 word level, enhances text comprehension, which means the tested teachers' vocabulary knowledge at this word level is too low to allow sufficient comprehension of most of the texts they encounter.

5.2.3 Research question 3

What kind of vocabulary instruction takes place in Grade 6 township schools?

To answer research question 3, lessons observations and interviews were conducted with the teachers. Eight teachers were observed teaching and thereafter an interview was conducted with the same teachers. The main conclusions drawn from the interviews and observations are discussed below.

5.2.1.1 Findings from lesson observations and interviews

The observations (refer 4.5 and its subsections) included both FAL and subject lessons. Five teachers taught FAL lessons, two taught Natural science and one teacher taught Mathematics. Natural science and Mathematics provided academic words. Therefore, it was of interest to find out how academic vocabulary was selected and taught and also if content subject teachers taught general vocabulary. The discussion that follows focuses on word selection, methods of teaching and the role of CAPS in the observed vocabulary instruction.

5.2.1.1.1 Word selection method

Overall the interviews and observations showed that word selection was teacher driven. Teachers selected words before the lesson (i.e. during preparation) or during the lesson as they read and considered a word important or new. The number of words selected ranged between two and five in the observed language teaching classes, and up to ten words in the content subject classes. Learner input was very rarely requested from teachers in selecting difficult words. Words that had been selected for teaching were mostly written on the board, and discussed once and perhaps a second time (one teacher did try to put words in context). No teachers provided multiple exposures to new words. Teachers did not seem to use a specific method for selecting words other than seeming to link new words to a selected theme, or to a theme provided by the DBE workbooks. I did not observe specific attempts to link new words to known words from previous lessons; neither did they create subsequent exposure of word(s) from previous lesson.

5.2.1.1.2 Methods of teaching

Vocabulary teaching was not given much attention in the language classroom. Although all the teachers taught vocabulary in their lessons, little time was spent on explicit vocabulary teaching. Teacher explanation was the most-observed method. The interviews confirmed that most teachers used teacher explanation and inference from context. Teachers tended to do most of the talking, asking questions, explaining meanings of words if learners did not respond and writing on the chalkboard. Most words were explained (superficially) during the lesson. Teacher explanation was done mainly when the teacher came across the unfamiliar word during reading. Lessons were predominantly teacher centred. Very few learners were observed to participate spontaneously or otherwise in the teaching process. Although teachers indicated during the interviews that they also used the dictionary often, only two teachers were observed calling for the use of dictionaries to look up the meanings.

5.2.3.1.3 CAPS and vocabulary instruction

Overall it seemed that teachers were not familiar with what is required regarding vocabulary teaching in the CAPS document. Their knowledge of vocabulary teaching seemed to have been acquired from the lesson plans and work schedules or Annual Teaching Plans (ATP) that were provided by the Department of Basic Education (DBE). Despite this, they did not seem to know what was expected of them when teaching vocabulary. Several teachers

indicated that they had not read the policy document although they knew from lesson plans and ATPs that vocabulary is one of the aspects that should be taught in the FAL classroom. One teacher pointed out that the CAPS stated that vocabulary should be taught but did not indicate the word levels that should be emphasised - hence she taught any words she assumed not to be known by learners. None of the teachers knew about the CAPS requirement that learners should know 3000-5000 words by the end of Grade 6. When I pointed this out to them, they were of the opinion that the stated number of words was unattainable since many learners had limited exposure to the FAL both at home and at school.

Although CAPS recommends the use of the dictionary, most teachers argued that overreliance on the dictionary was detrimental to extensive reading and so discouraged learners from using the dictionary often. They encouraged their learners to infer meanings from context rather than refer to dictionaries whenever they came across unfamiliar words. Some of them advised learners to skip unfamiliar words and hoped that learners would comprehend the texts.

Teachers indicated during the interviews that they also used synonyms and antonyms quite often so that learners develop a deeper understanding of the new words. However, during lesson observations, none of the teachers were seen to ask learners to give synonyms or antonyms of the words they taught.

Generally, although teachers seemed to know that unfamiliar words should be taught, they lacked proper methods of vocabulary instruction. They were not aware that multiple exposures in word learning are necessary for deep word knowledge of a word. When I pointed this out to them, they said that the FAL syllabus required a lot of work, which meant they did not have sufficient time to create multiple exposures of a word.

Overall it seemed that teachers did not fully understand the importance of vocabulary knowledge, nor did they have adequate knowledge of what was required for vocabulary teaching in the CAPS document. They also lacked knowledge of vocabulary teaching methods (admittedly, their training had not touched on this, nor does the CAPS document provide much help in this regard), but one cannot help but wonder about the impact of their own low vocabulary levels on their ability to and attitude towards vocabulary teaching, and the resultant effect on their learners vocabulary levels.

5.2.4 Research question 4

What percentage of words at different levels is used in learners' writing?

To answer research question 4, I collected samples from learners' FAL written work which comprised a sample of 3897 words and was analysed using the on-line VocabProfiler which sorted the words into their respective frequency levels (see §4.4.1 Table 17).

5.2.1.2 Levels of words from learner own productions

The analysis of the words from learners' own production indicated that from a total sample of 3897 words 86.4% of the words (3365) belonged to the 1000 word level. This figure is significantly higher than the 70% recommended by Nation as ideal, especially at Grade 6 level. It signifies a weak linguistic competence in as far as vocabulary knowledge is concerned. Only 6.6% (258 words) of the sample comprised words at the crucial 2000 word level, which is below the recommended 10%. Basic everyday communication which is hinged on this level is therefore difficult for learners with this size of vocabulary knowledge. It also indicates that teachers seem to focus on teaching the 1000 level words which learners can acquire without explicit instruction. The UWL percentage is concerning at 0.98% (38 words), which is far below the recommended 10% - an indication that scientific vocabulary is not taught seriously in the participating FAL classrooms. The rest of the word levels which include the 3000, 5000, and 10000 word levels referred to here as Off-list words recorded 6.06% (236 words). Words in these levels are for enhanced comprehension. It follows therefore, that comprehension of texts is an issue amongst learners in this study.

5.2.1.3 Levels of words learners are exposed to by teachers

Given the percentages in learners own writing described above, it was not surprising that the findings revealed that 73.4% of the words learners were exposed to by teachers belonged to the 1000 word level, 9.9% were the 2000 word level words, 1.9% of the words were UWL level words and 14.7% were Off-list words. As mentioned above, the ideal distribution of words in a native speaker written text should be 70% at the 1000 level, 10% at the 2000 level, 10% at the UWL and 10% at the other levels (Off-List words). The use of more than 70% of words at the 1000 level (73.4%) is an indicator of weak linguistic competence. Since teachers copied most of these words from the textbooks they used, it seems to suggest that the text books used in the classroom focused on the 1000 level words and not on the 2000 level words that should be taught to learners at Grade 6 level. The vocabulary they focus on does not

address the needs of learners (learners need knowledge of 2000 word level for basic communication) and does not therefore adequately develop grade level vocabulary in learners. The 9.9% of words in the 2000 level, although close to the 10% recommended, indicates that teachers focus less attention on teaching words at this level despite basic communication depending on knowledge of words in the 2000 level.

A very small proportion of the UWL words (1.9%) is concerning. It would seem that teachers neglect academic words. From the FAL classwork, there were no expository texts taught, seeming to suggest that FAL teachers avoid teaching expository texts. It would also seem that the content subject teachers do not spend time on teaching general vocabulary. From the two sets of vocabulary profiles, it would seem that the teachers' vocabulary choice for explicit instruction in the classroom affects learners' vocabulary development.

With the above findings which indicate the percentages of words at different word levels of learners' writing as revealed by the FAL activities in the learners' exercise books, it is clear that vocabulary development among learners in this study is alarmingly poor and well below the level required for academic success at their grade level.

5.3 Conclusions

From the above discussion, the following final conclusions can be made:

The PVLTL results for both learners and teachers show that:

- Grade 6 AL vocabulary levels are far below what is required at their grade level. Their scores at all levels of the PVLTL means that even basic communication in the FAL will be a struggle, and that they will most likely read at frustration level. The sample size used in this study was fairly large, and if one were to generalise this study's results to the greater township school population in the country, then they are of grave concern for our learners. Teacher vocabulary levels are lower than required for effective FAL teaching.
- Teachers' vocabulary at all levels was lower than what is recommended for teachers. If teachers themselves are struggling to comprehend text or perform basic communication in the FAL, how can they be expected to teach not only vocabulary, but any aspect of the FAL, to their learners? If the teacher scores obtained in this

study reflect in any way the FAL abilities of the wider teacher population in South Africa, it is further cause for great concern. From the triangulation of data from the classroom observations, teacher interviews and learner FAL workbooks, the following can be concluded: Teachers display a lack of knowledge about the importance of vocabulary teaching and teaching methods. This has been discussed in detail in Chapter 4 (see § 4.5.3) and also in section 5.2.4.2

The next section (5.4) provides recommendations that I think can help solve problems discussed in the previous section so as to increase vocabulary development among learners and teachers.

5.4 Contributions of the study

The present study contributes to the existing body of knowledge about the importance of productive vocabulary in academic achievement in schools. It also contributes specifically to knowledge of AL vocabulary levels in township schools, especially through the sizable number of learners (881) tested in the study. The extremely low vocabulary levels displayed by the 881 learners tested in this study should provide ample evidence for the need for serious intervention in schools, both at learner and teacher level.

In addition, there seems to be very little existing South African research about teachers' vocabulary knowledge – knowing teachers' vocabulary level could positively inform their approach to teaching in general and vocabulary teaching in particular. Having insight into vocabulary teaching methods currently used (if at all) by township school teachers, could inform teacher training institutions and curriculum designers in how best to support teachers in regard to vocabulary development.

5.5 Limitations of the study

The study was mainly quantitative in nature. It would have been useful to obtain more qualitative data to allow for more substantive conclusions about the quantitative data. However, this was prevented mainly by factors beyond my control, namely teacher union intervention, teachers' reluctance and fear of being observed and teachers not being forthcoming during interviews. In addition, the size of my sample (16 schools, 881 learners) was at times a double-edged sword because it became difficult to cover the whole area by myself within the short time frame for research permitted by the DBE.

5.6 Implications of the findings

The findings of this study have several implications as outlined in the subsequent sections.

5.6.1 Implications for teacher education

The poor results of the Grade 6 PVLTs in the participating schools reflect back to the teachers. It is clearly necessary that teachers receive proper training so that they become competent in classroom delivery. Properly-trained teachers will have a repertoire of teaching methods at their disposal to deal with all aspects of teaching and in terms of all language skills, including vocabulary teaching. Learners can also benefit from strategy use instruction. Therefore, properly-trained teachers would teach learners vocabulary learning strategies. The teachers' training colleges that focus on all levels, i.e. pre-school to Grade 12, should be re-established. With regard to in-service teachers, meaningful workshops facilitated by specialists in the field of vocabulary teaching should be organised and monitored by the Department of Basic Education.

The teachers that participated in this study were clearly not teachers who read actively themselves. They did not seem to have a need to develop their own vocabulary by engaging in extensive reading. This seemed to affect their ability to interpret policies. The training of teachers should extend to not only what and how they teach, but also to their self-development. It is important that teachers increase their vocabulary so as to be able to translate policies, the curriculum, syllabi and texts accurately. One way of ensuring continued development of teachers is to instigate compulsory in-service training on a variety of issues, such as improving their vocabulary, and in particular their academic vocabulary. Well-developed teachers should, in theory, lead to learners that perform well.

5.6.2 School resources

The study was conducted in a low SES township area, and it was clear that poverty had implications for the academic achievement of learners in general and their FAL vocabulary development in particular. Schools were poorly resourced in terms of books and textbooks that support academic success and vocabulary development. Schools did not have readers and libraries which help learners to develop a reading culture.

At home there was limited access to storybooks that parents can use to complement reading at school. In addition many parents are themselves illiterate or unable to read in the FAL, further compounding the problem of continued learning at homes.

In view of the mentioned factors, it is clear that the government needs to do more in terms of equipping schools, particularly in poorer township areas, with adequate reading and teaching resources. From Grade 1 upwards, the DBE should prescribe grade level books for each grade. Once a proper syllabus for each grade is designed and approved, books that address the demands of the syllabi should be written and evaluated by the DBE and the curriculum development unit (CDU). Text books, especially FAL textbooks, should focus specifically on the acquisition of the 2000 level words, and continue to include a focus on the higher levels in higher grades.

5.6.3 Implications for curriculum development

A curriculum is an important tool that determines what should be taught to learners in any school subject at any given grade level. The South African English FAL curriculum, as stated earlier, provides broad guidelines but does not provide teachers with specifics, such as the levels of words that should be taught at each grade and *how* the words should be taught. While the curriculum spells out clearly how many words learners need to be taught at each grade, it should also spell out the levels of words that teachers should put emphasis on at each grade. It would be of great help to teachers if the curriculum provided a South African word level standard per grade for FAL learners as well as the methods of how to teach the words at each grade.

5.7 Recommendations for future research

Since a single study cannot focus on too wide a spectrum, almost every study ends with thoughts about what could be researched further. This section presents recommendations for future research.

1. Since the present study focused on Grade 6 learners in the township schools of one district in one province, it would be useful to conduct similar studies in districts in other provinces, thereby providing results that could more justifiably be generalised to the whole school population.

2. It could be useful to conduct a longitudinal study to determine the growth of learners' productive vocabulary size from grade 4 to 6 and then test them at the end of Grade 6. Mellow, Reeder and Forster (1996) argue that longitudinal studies bring about authentic results since language learning and indeed vocabulary development occurs over time. Through a longitudinal study it would be easier to identify problems that result in poor vocabulary in learners.
3. Since vocabulary contributes significantly to comprehension, it would be useful to measure comprehension levels together with vocabulary levels over a long period of time so as to more accurately measure effects of vocabulary on comprehension.
4. Student teachers at teacher-training institutions should be taught the basics of research to encourage them to, for example, perform an intervention on their learners and test vocabulary and comprehension levels before and after the intervention over at least one year. This procedure would not only show teachers where to improve their teaching, but also inform them about whether vocabulary growth is taking place at all.

5.8 Conclusion

In conclusion, the findings that emerge from this study resonate with the popular quote which states: '*Without grammar very little is understood, without vocabulary nothing is understood*' (Wilkins 1971: 111). The study reveals that the vocabulary size of learners and teachers in the participating township schools is concerning and urgent intervention is required by all stakeholders since vocabulary is the pillar of all learning.

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APPENDIX A: PRODUCTIVE VOCABULARY LEVEL TEST VERSION C FOR LEARNERS

Gender:

BOY		GIRL	
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(TICK ✓)

Instructions

Answer **all** the levels.

Complete the underlined words following the example below.

The morning meal is bre_____. The morning meal is breakfast.

The 2000-word level

- 1 The la_____ of rain led to a shortage of water in the city.
- 2 The rich man died and left all his wea_____ to his son.
- 3 Pup_____ must hand in their papers by the end of the week.
- 4 This seater is too tight. It needs to be Stre_____.
- 5 If you blow up that balloon any more it will bur_____.
- 6 In order to be accepted into the university, he had to impr_____ his grades.
- 7 The differences were so sl_____ that they went unnoticed.
- 8 The dress you are wearing is lov_____.
- 9 It is the de_____ that counts not the thoughts.
- 10 Plants receive water from the soil through their ro_____.
- 11 The nu_____ was helping the doctor in the operating room.
- 12 Since he is unskilled, he earns low wa_____.
- 13 This year long ski_____ are fashionable again.
- 14 He is walking on the ti_____ of his toe.
- 15 They had to cl_____ a steep mountain to get to the cabin.
- 16 She wan_____ aimlessly in the streets.
- 17 This work is not up to your usu_____ standard.
- 18 They sat down to eat even though they were not hun_____.

Total_____.

3000-word level

- 1 She wore a beautiful green go_____ to the ball.
- 2 Many people in England mow the la_____ of their houses on Sunday.
- 3 The farmer sells the eggs that his he_____ lays.
- 4 Sudden noises at night sca_____ me a lot.
- 5 Many people are inj_____ in road accidents every year.
- 6 Suddenly, he was thru_____ into the dark room.
- 7 She showed off her sle_____ figure in a long narrow dress.

- 8 You must wear a bathing suit on a public beach. You are not allowed to bath na_____.
- 9 Before writing the final version, the students wrote several dr_____.
- 10 It was a cold day. There was a ch_____ in the air.
- 11 The cart is pulled by an o_____.
- 12 His beard was too long. He decided to tr_____ it.
- 13 People were whir_____ around on the dance floor.
- 14 You'll sn_____ that branch if you bend it too far.
- 15 I won't tell anybody. My lips are sea_____.
- 16 You must be aw_____ that very few jobs are available.
- 17 After two years in the Army, he received the rank of lieu_____.
- 18 The pro_____ of failing the test scared him.

Total _____.

5000-word level

- 1 Soldiers usually swear an oa_____ of loyalty to their country.
- 2 The voter placed the ball_____ in the box.
- 3 They keep their valuables in the vau_____ at the bank.
- 4 The kitten is playing with a ball of ya_____.
- 5 We decided to celebrate New Year's E_____ together.
- 6 We could hear the sergeant bel_____ commands to the troops.
- 7 The boss got angry with the secretary and it took a lot of tact to soo_____ him.
- 8 Some people find it difficult to become independent. They prefer to be tied to their mother's
ap_____ strings.
- 9 The workmen cleaned up the me_____ before they left.
- 10 I saw them sitting on the st_____ at the bar drinking beer.
- 11 People manage to buy houses by raising a mor_____ from a bank.
- 12 At the bottom of the blackboard, there is a le_____ for chalk.
- 13 After falling off his bicycle, the boy was covered with brui_____.
- 14 The child was holding a doll in her arms and hu_____ it.
- 15 The picture looks nice; the colours ble_____ very well.
- 16 Nuts and vegetables are considered who_____ food.
- 17 Many gardens are full of fra_____ flowers.
- 18 Many people feel depressed and gl_____ about the future of mankind.

Total _____.

University Word List (UWL)

- 1 I had my eyes tested and the optician says my vi_____ is good.
- 2 The anom_____ of his position is that he is the chairman of the committee, but isn't allowed to vote.
- 3 In their Geography class, the children are doing a special pro_____ on North America.

- 4 In a free country, people are not discriminated against on the basis of colour, age and s_____.
- 5 A true dem_____ should ensure equal rights and opportunities for all citizens.
- 6 The drug was introduced after his medical res_____ indisputably proved its effectiveness.
- 7 These courses should be taken in seq_____, not simultaneously.
- 8 Despite his physical condition, his int_____ was not affected.
- 9 Governments often cut budgets in times of financial cr_____.
- 10 The job sounded interesting at first, but when he realized what it involved, his excitement sub_____.
- 11 Research ind_____ that man find it easier to give up smoking than women.
- 12 In a lecture, a lecturer does most of the talking. In a seminar students are expected to part_____ in the discussions.
- 13 The airport is far away. If you want to en_____ that you catch your plain, you will have to leave early.
- 14 Its difficult to ass_____ a person's true knowledge by one or two texts.
- 15 The new manager's job was to res_____ the company to its former profitability.
- 16 Even though the students didn't do well, on the mid-term exam, he got the highest mark on the fi_____.
- 17 His decision to leave home was not well thought out. It was not based on rat_____ considerations.
- 18 The challenging job required a strong successful and dy_____ candidate.

Total _____

The end

Thank you.

APPENDIX B: PRODUCTIVE VOCABULARY LEVEL TEST VERSION A FOR TEACHERS

Tick in the appropriate box

Instructions.

Answer **All** the levels.

Complete the underlined words following the example below.

A sh_____ is a big fish. A shark is a big fish.

2000-word level.

- 1 I am glad we had this opp_____ to talk.
- 2 There are a doz_____ eggs in the basket.
- 3 Every working person must pay income t_____.
- 4 The pirates buried the trea_____ on the Island.
- 5 Her beauty and ch_____ had a powerful effect on man.
- 6 The la_____ of rain led to the shortage of water in the city.
- 7 He takes cr_____ and sugar in his coffee.
- 8 The rich man died and left all his we_____ to his children.
- 9 Pup_____ must hand in their papers by the end of the week.
- 10 This sweater is too tight. It needs to be stret_____.
- 11 Ann intro _____ her boyfriend to her mother.
- 12 Teenagers often adm _____ and worship singers.
- 13 If you blow up that balloon anymore it will bur_____.
- 14 In order to be accepted into university, he had to impr_____ his grades.
- 15 The telegram was deli_____ two hours after it had been sent.
- 16 The differences were so sl_____ that they went unnoticed.
- 17 The dress you are wearing is lov_____.
- 18 He wasn't very popu_____ when he was a teenager .But he has many friends.

Total _____.

3000 word-level

- 1 He has a successful car _____ as a lawyer.
- 2 The thieves through ac _____ on his face and made him blind.
- 3 To improve the country's economy, the government decided on economic ref_____.
- 4 She wore a beautiful green go _____ to the ball.
- 5 The government tried to protect the country's industry by reducing the impo _____ of cheap goods.
- 6 The children's games were amusing at first, but finally got on the parents' ner _____.
- 7 The lawyer gave some wise coun _____ to his client.

- 8 Many people in England mow the law_____ of their houses on Sunday morning.
- 9 The farmer sells eggs that his hen_____ lays.
- 10 Sudden noises at night scared_____ me a lot.
- 11 France was proclaimed_____ a republic in the 18th century.
- 12 Many people are injured_____ in road accidents every year.
- 13 Suddenly, he was thrown_____ into the dark room.
- 14 He perceived_____ a light at the end of a dark tunnel.
- 15 Children are not independent. They are attached_____ to their parents.
- 16 She showed off her slender_____ figure in a long narrow dress.
- 17 She has been changing partners often because she cannot have a stable_____ relationship with one person
- 18 You must wear a bathing suit on a public beach. You are not allowed to bathe naked.

Total_____.

5000 word-level.

- 1 Soldiers usually swear an oath_____ of loyalty to their country.
- 2 The voter placed the ballot_____ in the box.
- 3 They keep their valuables in a vault_____ at the bank.
- 4 A bird perched at the window ledge_____.
- 5 The kitten is playing with a ball of yarn_____.
- 6 The thieves have forced an entrance_____ into the building.
- 7 The small hill was really a burial mound_____.
- 8 We decided to celebrate New Year's Eve_____ together.
- 9 The soldier was asked to choose between infantry and cavalry_____.
- 10 This is a complex problem that is difficult to comprehend_____.
- 11 The angry crowd shouted_____ the prisoner as he was leaving the court.
- 12 Don't pay attention to this rude remark. Just ignore_____ it.
- 13 The management held a secret meeting. The issues discussed were not disclosed_____ to the workers.
- 14 We could hear the sergeant belting_____ commands to the troops.
- 15 The boss got angry with the secretary and it took a lot of tact to soothe_____ him.
- 16 We do not have adequate_____ information to make a decision.
- 17 She is not a child but a mature_____ woman she can make her own decisions.
- 18 The prisoner was put in solitary_____ confinement.

Total_____.

University Word List (UWL)

- 1 There has been a recent trend_____ among prosperous families towards a smaller number of children.
- 2 The area_____ of his office is 25 square metres.
- 3 The Philosopher_____ examines the meaning of life.

- 4 According to communist doc _____, workers should rule the world.
- 5 Spending many years together deepened their int_____.
- 6 He usually read the sports sec _____ of the newspaper first.
- 7 Because of the doctors' strike, the cl _____ is closed today.
- 8 There are several misprints on each side of this te _____.
- 9 The suspect had both opportunities and mot _____ to commit the murder.
- 10 They insp _____ all the products before sending them out to stores.
- 11 A considerable amount of evidence was accum _____ during the investigation.
- 12 The victim's shirt was satu _____ with blood.
- 14 Its impossible to eva _____ these results without knowing the research methods that were used.
- 15 He finally att _____ a position of power in the company.
- 16 The story tells about a crime and subs _____ punishment.
- 17 In a hom _____ class all students are of similar proficiency.
- 18 The urge to survive is inh _____ in all creatures.

Total_____.

10 000 word level

- 1 The baby is wet. Her dia _____ needs changing.
- 2 The prisoner was released on par _____.
- 3 Second year university students in the US are called soph _____.
- 4 Her favourite flowers were or _____.
- 5 The insect causes damage to plants by its toxic sec _____.
- 6 The evacu _____ of the building saved many lives.
- 7 For many people, wealth is the prospects of unimaginable felic _____.
- 8 She found herself in a pred _____ without any hope for a solution.
- 9 The deac _____ helped with the care of the poor of the parish.
- 10 The hurricane whi _____ along the coast.
- 11 Some coal was still smol _____ among the ashes.
- 12 The dead bodies were mutil _____ beyond recognition.
- 13 She was seating on a balcony and bas _____ in the sun.
- 14 For years, waves of invaders pill _____ towns along the coast.
- 15 The rescue attempt could not proceed quickly. It was imp _____ by bad weather.
- 16 I wouldn't hire him. He is unmotivated and indo _____.
- 17 Computers have made typewriters old-fashioned and obs _____.
- 18 Watch out for his wil _____ tricks.

Total_____.

The end

Thank you.

APPENDIX C: UNISA ETHICAL CLEARANCE



**DEPARTMENT OF LINGUISTICS AND MODERN LANGUAGES:
RESEARCH ETHICS REVIEW COMMITTEE**

25 August 2015

Ref #: AL_FM07_2015
Ms F Moyo
Student #: 3437 9568

Dear Ms Moyo

Decision: Ethics Approval

Name: Ms F Moyo
291 Mears Street, Muckleneuk, Pretoria
moyof@unisa.ac.za
+27 12 429 2234 / 0735106531

Supervisor: Dr N Klapwijk

Proposal: An overview of productive vocabulary levels among ESL learners and teachers in Gauteng township schools

Qualification: MA

Thank you for the application for research ethics clearance received on 11 August 2015 by the Department of Linguistics and Modern Languages Research Ethics Review Committee (RERC) for the above-mentioned research. Final approval is granted for the research undertaken for the duration of your MA studies.

For full approval: The application was reviewed in compliance with the Unisa Policy on Research Ethics by the Department of Linguistics and Modern Languages Research Ethics Review Committee on 24 August 2015.

The proposed research may now commence with the proviso that:

Open Rubric

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150

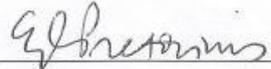
- 1) *The researcher will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.*
- 2) *Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the Department of Linguistics and Modern Languages Research Ethics Review Committee. An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.*
- 3) *The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.*

Note:

The reference number (top right corner of this communiqué) should be clearly indicated on all forms of communication (e.g. Webmail, e-mail messages, letters) with the intended research participants, as well as with the Department of Linguistics and Modern Languages RERC.

On behalf of the departmental RERC, we wish you everything of the best with your research study. May it be a stimulating journey!

Kind regards,



Prof EJ Pretorius

Chair: Department of Linguistics and Modern Languages RERC

Tel: (012) 429 6028

pretoej@unisa.ac.za



University of South Africa
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PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

APPENDIX D: APPROVAL LETTER FROM THE DEPARTMENT OF BASIC EDUCATION



GAUTENG PROVINCE

Department: Education
REPUBLIC OF SOUTH AFRICA

For administrative use:
Reference no: D2016 / 248
enquiries: Diane Bunting 011 843 6503

GDE RESEARCH APPROVAL LETTER

Date:	1 September 2015
Validity of Research Approval:	1 September 2015 to 2 October 2015
Name of Researcher:	Moyo F.
Address of Researcher:	291 Mears Street; Muckleneuk; Pretoria; 0003
Telephone / Fax Number/s:	012 429 2234; 073 510 6531
Email address:	moyof@unisa.ac.za
Research Topic:	An overview of productive vocabulary levels among ESL learners and teachers in Gauteng township schools.
Number and type of schools:	TWENTY Primary Schools
District/s/HO	Johannesburg South

Re: Approval in Respect of Request to Conduct Research

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

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

CONDITIONS FOR CONDUCTING RESEARCH IN GDE

1. The District/Head Office Senior Manager/s concerned must be presented with a copy of this letter;
2. A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB);

Handwritten signature and date: 2015/09/02

1

Making education a societal priority

Office of the Director: Knowledge Management and Research

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

Open Rubric

3. A letter / document that outlines the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned;
4. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, SGBs, teachers and learners involved. Participation is voluntary and additional remuneration will not be paid;
5. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal and/or Director must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage;
6. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year;
7. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
8. It is the researcher's responsibility to obtain written parental and learner consent;
9. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources;
10. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations;
11. On successful completion of the study the researcher must supply the Director: Education Research and Knowledge Management with an electronic copy (and a Hard copy if possible) as well as a Research Summary of the completed Research Report;
12. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned; and
13. Should the researcher have been involved with research at a school and/or a district office level, the Director and school concerned must also be supplied with the Research Summary of the study.

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

Kind regards

David Makhado
.....

Dr David Makhado

Director: Education Research and Knowledge Management

DATE: *2015/09/02*
.....

APPENDIX E: INFORMED CONSENT FORM - TEACHERS

UNIVERSITY OF SOUTH AFRICA CONSENT TO PARTICIPATE IN RESEARCH

Consent form for teachers

Measuring productive vocabulary levels of learners and teachers in township schools

You have been selected to participate in a research study conducted by Flora Moyo 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 measure the vocabulary level of grade 6 learners and teachers for the purpose of developing strategies and teaching methods that can enhance its acquisition. The study is linked to objectives and outcomes in the 2012 Curriculum and Assessment Policy Statement (CAPS) for Grades 4-6 as set out by the South African Department of Basic Education.

2. PROCEDURES

If you volunteer to participate in this study, we would like to test your learners' vocabulary, in their classes, at a time that suits you. We would also like to assess your own levels of vocabulary, and observe you in your classes. The information we obtain will only be available to the researcher for research purposes.

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 is conducted anonymously and requires no details which can be linked to individuals or schools.

4. PAYMENT FOR PARTICIPATION

No payment will be made for participation in this study.

5. 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 dissertation 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 to it.

6. 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.

7. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact Flora Moyo (the researcher) by phone at (+27 12 429 2234 or 0735106531, or via email at moyof@unisa.ac.za. Alternatively my supervisor, Dr Nanda Klapwijk can be contacted at (012) 429-2403 or 082 461 1410.

8. 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 child's 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.

By signing this form I 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 F : LETTER OF CONSENT – PARENTS (ENGLISH)

Ms Flora Moyo
Department of Linguistics
PO Box 392, UNISA, 0003
Tel: +27-12-429 2234
moyof@unisa.ac.za
...../..... / 2015

Dear Parent/Caregiver

The University of South Africa will be working with Grade 6 learners in Orange Farm Primary Schools to measure their English vocabulary. Your child can also participate in this project. The work done by the university will not harm your child and will not influence your child's progress in school. Your child's identity will be kept confidential if work from this project is discussed in any forum.

Please complete and return this letter to your child's teacher.

Thank you!

Kind regards

Mrs Flora Moyo (Junior Lecturer)

I, parent/caregiver of _____

(fill in child's name in above space)

hereby give permission that my child can participate in the UNISA study.

Signature of Parent/Caregiver

Date

APPENDIX G : LETTER OF CONSENT – PARENTS (B)

Ms Flora Moyo
Department of Linguistics
PO Box 392, UNISA, 0003
Tel: +27-12-429 2234
moyof@unisa.ac.za
...../...../ 2015

Motswadi/Mohlokomedi yo a rategago

Yunibesithi ya Afrika Borwa e tlile go šoma le baithuti ba Kereiti ya 3 mo Sekolong sa Poraemari sa Patogeng go ithuta go gontši ka ga polelo le ka ga go bala ga bana ba bannyane. Ngwana wa gago le yena a ka no tšea karolo mo go protšeke ye. Mošomo wo o dirwago ke yunibesithi o ka se ke wa kweša ngwana wa gago bohloko eupša o tla huetša tšwelopele mo mošomong wa ngwana wa sekolo. Boitsebišo bja ngwana wa gago bo tla swarwa sephiri ge mošomo wo o tšwago mo protšekeng ye o ahlaahlwa mo foramong efe goba efe.

O kgopelwa go tlatša le go bušetša lengwalo le go morutiši wa ngwana wa gago.

Ke a leboga!

Ka tlhompho

Ms Flora Moyo (Junior Lecturer)

Nna ,motswadi/mohlokomedi wa _____

(tlatša leina la ngwana mo sekgobeng se sa ka godimo)

Ka fao ke fa tokelo ya gore ngwana wa ka a ka tšea karolo mo go thuto ya UNISA.

Tshaeno ka Motswadi/Mohlokomedi

Letšatšikgwedi

APPENDIX H : LETTER OF CONSENT (C)

Ms Flora Moyo
Department of Linguistics
PO Box 392, UNISA, 0003
Tel: +27-12-429 2234
moyof@unisa.ac.za
...../..... / 2015

Kuwe Mzali

I Nyuvesi ye South Africa iUNISA, izasebenzisana labafundi abasezingeni lesithupha (Grade 6) ezikoleni zeprimary eOrange Farm kuhlolisiswa ukubana laba bafundi bazi inani elingakanani elamagama eSingisi. Lengane yakho ilakho ukungena kulokhu kuhlolisisa. Lumsebenzi awuzukufaka ingane yakho engcopheni njalo igama lengane yakho lizaba yimfihlo uma kuthe kwathethwa ngempumela yalomhloliso.

Kungakho uyacelwa ukuba ugcalise ifomu leyo uyiphendukise kutisha.

Ngenhlonipho enkulu

Ngiyabonga

Ms Flora Moyo (Junior Lecturer)

Mina mzali oka _____

(Gcwalisa igama lengane)

Ngiyavumela ingane yami ukuba iphathise kulomsebenzi oweUnisa

Igama lomzali

Date

APPENDIX I : ASSENT FORM

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.

 UNISA university of south africa	UNIVERSITY OF SOUTH AFRICA
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PARTICIPANT INFORMATION LEAFLET AND ASSENT FORM



TITLE OF THE RESEARCH PROJECT:

Measuring Grade 6 learners' productive vocabulary

RESEARCHER'S NAME: Mrs Flora Moyo

ADDRESS: 291 Mears street Mcklenuek

CONTACT NUMBER: 0735106531

What is this research project all about?

This research is about measuring Grade 6 learners' productive vocabulary to see if we can find ways to improve the way we teach vocabulary at school.

What will I have to do in this study?

You will not have to do anything different or difficult in the research. All you have to do is to write a short vocabulary test. You will do it in class with your classmates.

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 (Mrs Moyo) answered all your questions?

 YES NO

Do you understand that you can stop taking part in the study at any time?

 YES NO

Name/Signature of Child

Date

APPENDIX J: LETTER TO PRINCIPAL

Department of Linguistics

UNISA 0003

Tel+27 12 429 2234

moyof@unisa.ac.za

...../...../October 2015

Dear Sir /Madam

REQUEST TO PARTICIPATE IN AN ACADEMIC RESEARCH PROJECT

Your school has been selected to participate in a research study which I am conducting in order to obtain 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 measure the vocabulary levels of grade 6 learners.

If you volunteer to participate in this study, I would like to test Grade 6 learners' productive vocabulary through the use of a vocabulary test. I would also like to give a similar test to the teachers, and also observe the teachers in their classes.

This study does not entail any risks, discomforts or inconveniences. The vocabulary test and observations will form part of the participating teacher's everyday teaching activities. The vocabulary assessment of learners' tests will be conducted by the researcher at a time agreed by 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 dissertation 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

Mrs F Moyo

Department of Linguistics & Modern Languages, UNISA

APPENDIX K: LESSON OBSERVATION SHEET

Name of teacher: _____

School: _____

Gender: _____

Grade taught: _____

Subject: _____

Lesson Topic: _____

Teaching material

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.....
.....
.....
.....

Evidence of vocabulary teaching

.....
.....
.....
.....
.....

Vocabulary selection methods

.....
.....
.....
.....
.....

Number of words selected for explicit instruction

.....
.....
.....
.....

Methods of teaching used

.....
.....
.....
.....

Teacher and learner activities during vocabulary teaching

Teacher activities	Learner activities

APPENDIX L: INTERVIEW SCHEDULE

School:

Name of teacher:

Gender:.....

Years of teaching experience.....

Grade Taught:

The interview schedule comprises **5 sections** with **20 questions** in total. You are kindly requested to answer all the questions and also to give your honest opinion regarding each question.

CAPS and vocabulary teaching

1 What is CAPS policy regarding vocabulary teaching?

.....
.....
.....

2 Does CAPS specify the levels of words that should be taught?

.....
.....
.....

3 CAPS expects grade 6 learners to know about 3000 words by the beginning of grade 6 and to acquire about 5000 words by the end of grade 6. Do you think a vocabulary size of this size/magnitude is attainable? Why?

.....
.....
.....
.....
.....

4a) In your own opinion do you think CAPS is putting enough emphasis on vocabulary teaching?

.....
.....

4b) How?

.....
.....
.....
.....

How words are selected for teaching

5 How often do you teach vocabulary?

.....
.....
.....

6a) How do you select words for teaching?

.....
.....
.....

6b) Do you give learners an opportunity to select unfamiliar words? How and when? Explain.

.....
.....
.....
.....

7 What are your sources of the words that you select for teaching and how many words do you teach in one lesson?

.....
.....
.....

8a) During which part of the lesson do you teach unfamiliar words?

.....
.....
.....
.....

8b) How many times do you teach an unfamiliar word in different contexts?

.....
.....

.....
.....
Methods used for teaching vocabulary

9 What methods does CAPS recommend for teaching vocabulary/unfamiliar words?

.....
.....
.....
.....

10 What is your preferred method of vocabulary teaching? Why?

.....
.....
.....
.....
.....

11 Do learners use dictionaries to find meanings of unfamiliar words?

.....
.....
.....

12 Have you noticed any specific problems with the use of dictionaries?

.....
.....
.....
.....

13 CAPS emphasizes context in teaching new and unfamiliar words. Do you teach learners to find contextual clues around the word so as to be able to infer meanings of words that are unfamiliar?

.....
.....
.....
.....
.....

14 How do you assess or make sure that learners have mastered the new words?

15 As a FAL teacher do you think vocabulary teaching is really important and necessary?

.....
.....
.....
.....

16 As a FAL teacher, what are you doing to encourage vocabulary learning outside the classroom?

.....
.....
.....
.....

17 What is the attitude of learners towards vocabulary learning?

.....
.....
.....

Thank you.

APPENDIX M: SAMPLE OF COMPLETED OBSERVATION SHEET

Name of teacher: Ms Y

School: B

Gender Female

Grade taught: Grade 6 (39 learners)

Subject: English

LessonTopic: Comprehension: Why leopards have sports

Teaching material

- Comprehension passage,
- Picture of a leopard
- List of words from the story (5 words)
- Chalkboard

Evidence of vocabulary teaching

- Teacher selection vocabulary 5 words and wrote them on the on the chalkboard during the lesson. The words included *Cunning*, *sniffed*, *spiraled (wrongly spelt)*, *yelled*, and *suffocated*,
- Learners took turns to read the story.
- Five words were written on chalkboard as they were encountered and explained to learners during loud reading.
- The teacher explained words (verbally and superficially) when learners could not explain them.

Teacher used illustrations and one homonym in each case. A dictionary was used to find the meaning of only **one** word (*cunning*).

Vocabulary selection methods

- The words (5) were selected by the teacher during the lesson.
- Learners added one more words; *choked*

Number of words selected for explicit instruction

Five (plus one selected by learner) words were selected for explicit instruction as shown in the list above;

Methods of teaching used

- After reading the story the teacher led a discussion on the events and characters in the story through questions and answers. The teacher asked the meaning of the word *cunning* and because learners were not able to answer, the teacher asked learners to find the word in the dictionary. There was one dictionary in the classroom and the two learners who paired to find the word struggled to find it.

-Teacher used explanation, and during the course used synonyms for words like clever for cunning.

Teacher and learner activities during the lesson

Teacher activities	Learner activities
-Teacher read the story again slowly stopping briefly to ask one or two questions about events and characters	-Learners listened and answered a few questions posed by the teacher and predicting what would happen next.
-Teacher led a class discussion through question and answer in which they discussed the characters of the animals in the story.	-learners answered questions and described the animal characters in the story. They used some of the new words to describe the characters of the animals, hare and leopard.
-Teacher gave learners three words as a written exercise to give meanings using their own words together with five comprehension questions.	-Learners wrote answers into their books in pairs or individually giving meanings of the words in their own words after answering 5 comprehension questions. -They gave meanings of, <i>sniffed</i> , <i>spiraled</i> , and <i>suffocated</i> .

Vocabulary Assessment methods

The teacher assessed if vocabulary taught was mastered by asking learners to explain meanings of three words using their own words.

Evaluation of the lesson

Good learners (*six*) understood the story. The teacher seemed to focus more attention on the six actively participating learners and occasionally involved the quiet learners. These good learners were able to describe the characters of hare and leopard correctly orally and used some of the new words correctly although some of them could not express themselves adequately. (three of which were literal level questions, no opinion/evaluation questions). Good learners (6) were also able to answer all of the comprehension questions correctly. Learners with reading problems (*a sample of 13 learner exercise books*) had problems with writing and answered one or two comprehension questions correctly. Good learners were able

to give correct meanings of the words tested. Learners from the sampled 13 books were not able to give correct meanings even though the words were discussed during the lesson. In this class only 6 out of 38 learners actively participated in the lesson and could communicate better than others in the AL. (*38 is a large class*). It is these learners who were able to give correct answers to the vocabulary questions. The vocabulary aspect was not given due attention. The teacher was worried about learners understanding the story. Learners were not encouraged to bring dictionaries to class. The teacher did not worry about teaching the learners how to find words in the dictionary nor did he teach any vocabulary learning strategy.

Thank you.